



AGRICULTURAL OUTLOOK

Economic Research Service
United States Department of Agriculture

• January-February 1992

***U.S. Agriculture 1992:
Challenges & Opportunities***

AGRICULTURAL OUTLOOK



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Outlook for U.S. and World Agriculture in 1992

The combined January-February issue of *Agricultural Outlook* traditionally inaugurates the new year with a look at what's ahead for U.S. agriculture. This issue previews the challenges and opportunities likely to confront the sector in 1992 and beyond.

The U.S. economy sputtered its way into the new year, with mediocre performance at the end of 1991 dashing hopes for a robust recovery. On the bright side, rises in most retail food prices will remain below the rate of increase expected for the overall CPI except for some fruits and vegetables. While farm income is unlikely to match 1990's record, most indicators point to financial stability in 1992.

The U.S. enters 1992 with an abundance of red meat and poultry, but supplies of some winter vegetables slashed by a whitefly infestation in California and Arizona. The 1991/92 grain crop is projected 10 percent below the previous year, the 1992/93 winter wheat crop is off to a precarious start, and the forecast for grain ending stocks is the lowest since 1975/76.

In 1992/93, U.S. crop acreage and production are likely to expand as producers respond to higher prices and smaller acreage reduction requirements for grains, and if favorable growing conditions resume. However, given the outlook for reduced wheat ending stocks this season, production would have to rise nearly a fourth in 1992/93 just to keep wheat supplies at this year's level.

U.S. meat production in 1992 is projected to increase more than 3.5 percent from 1991's record output. Beef, poultry, and pork output are all expected to rise, with strong gains in pork leading the way. Large supplies of all meats will also pressure hog and poultry prices lower, squeezing producer returns.

Red meat consumption in 1992 is expected to expand nearly 4 pounds per capita, due entirely to increased supplies of pork. Overall meat consumption



is expected to be about 223 pounds per capita, up 7 pounds from 1991's record.

Grower prices for fruit and vegetables have become extremely volatile over the past 2 years, propelled mainly by adverse weather, and more recently by the destructive whitefly. Through early 1992, grower prices for most horticultural products are likely to remain high. In addition to reduced winter vegetable supplies from California and Arizona due to the whitefly, lower acreage in Florida and western Mexico may keep prices relatively high over winter and early spring.

World grain stocks at the start of the 1992/93 marketing year will be moderately reduced as significantly lower U.S. stocks more than offset record foreign carryover. Crop prospects for 1992 will be important for grain consumers because a poor world grain crop in 1992 could further reduce global stockpiles.

Meanwhile, events in the Soviet Union and Central and Eastern Europe continue to intrude on the global and domestic outlook for agriculture, adding a level of uncertainty rivaled only by weather. Although the long-term potential for

rising Soviet imports of feedstuffs is considerable, for now the fractured Soviet Union continues to turn to the West for assistance in meeting immediate food needs while the various republics grapple with economic and political reform.

At present, potential agricultural demand and supply in Central and East European economies (CEE's) is uncertain. Many will likely strive for self-sufficiency in agriculture. In the meantime, many CEE's are seesawing between a search for export markets for some products to earn badly needed hard currency, and appeals for food aid to avert shortages.

Overall global conditions point to expanded trade opportunities for several U.S. commodities. Stronger international markets will propel an upswing in U.S. agricultural exports, with an expected value of \$39 billion in fiscal 1992, up about 4 percent from 1991. The combination of larger exports and smaller imports would boost the U.S. agricultural trade surplus to around \$17 billion, up 14 percent from 1991.

The mixed supply situation and export outlook for U.S. commodities is likely to be mirrored in the farm sector's cash receipts and income performance for the coming year. Cash receipts to U.S. farmers in 1992 are forecast close to 1991's level, with a modest increase likely in production expenses. The forecast would leave farmers with net cash income of \$52 to \$57 billion, compared with \$58 billion estimated for 1991. Net farm income is forecast at \$40 to \$46 billion in 1992, a range bracketing the \$44 billion expected in 1991.

Although 1992 farm income is likely to post a second year of retreat from 1990's record, signs of fundamental financial strength are evident, and no severe financial stress looms on the horizon for most U.S. farmers. Less of farmers' cash income will go for interest payments on debt, so cash is available for other expenses or savings. For 1992, the farm sector's balance sheet looks relatively stable.

Agricultural Economy



Economy, World Events In Spotlight

The prosperity of U.S. agriculture in 1992 and beyond will continue to depend significantly on the ability to turn challenges that originate elsewhere into opportunities. Barely into the decade, there has been no shortage of such challenges for U.S. agriculture—from the tumultuous political and economic upheavals in Central Europe and the Soviet Union, to a series of adverse weather and pest problems, to a faltering economic recovery.

Events in the Soviet Union and Central and Eastern Europe continue to intrude on the global and domestic outlook for agriculture, adding a level of uncertainty rivaled only by weather. Since the mid-1980's, USSR imports have accounted for 18 percent of world trade in wheat and coarse grains. In recent years, U.S. exports to the USSR have averaged 16 percent of total U.S. wheat and coarse grain exports.

The longer term potential for rising Soviet imports of feedstuffs is considerable as meat demand grows and livestock and poultry numbers expand in response to economic recovery and enhanced con-

sumer purchasing power. For now, however, the USSR continues to turn to the West for assistance in meeting immediate food needs while the various republics grapple with economic and political reform.

Growth in former centrally planned Central and East European economies (CEE's) is likely with the shift to free markets. At present, the shape of potential market agricultural demand and supply in these countries is uncertain. In recent years, they accounted for 29 percent of the world's imports of wheat and coarse grains. In the years ahead, however, many are likely to strive for self-sufficiency in agricultural production.

In the meantime, many CEE's are saw-sawing between the search for export markets in order to generate badly needed hard currency, and appeals for food aid to avert potential shortages. At present, the CEE's have surpluses of some products that cannot be disposed of in their income-devastated economies. As their incomes recover and consumption rises, however, they will likely need to import relatively large amounts of certain agricultural products.

Global demand for agricultural commodities will be supported by continued economic recovery, with real economic growth of around 2.5 percent and population growth of about 1.7 percent. Developing economies continue to show the most potential as growth markets for agricultural imports. The U.S. has become increasingly dependent on imports by these countries, with about half of U.S. grain exports now going to developing countries.

The pace of imports by these countries should increase in the 1990's, assuming trade and farm policy reforms, a faster economic recovery, and debt reduction. The U.S. would be in an excellent position to meet larger demand for commodities by developing countries.

Elsewhere, many industrialized economies have expanded production and exports while cutting imports of agricultural products. Proposed reforms would have a major impact on production and trade in grains and oilseeds by these

countries. For example, in the EC and Japan, liberalizing trade restrictions and reforming farm policies would result in larger imports of agricultural products.

Global Grain Output Down in 1991/92

The current world commodity outlook for 1991/92 features smaller production of many crops but rising output of animal products. Global grain production is forecast down 5 percent, but the decline is mainly due to lower Soviet and U.S. crops. Excluding the Soviet Union and the U.S., global output is actually slightly larger than last year. Likewise, a drop in USSR grain consumption also understates world consumption. Excluding the USSR, global consumption shows a small year-to-year rise.

The global wheat outlook for 1991/92 is highlighted by smaller supplies, use, and ending stocks, but near-record trade. Likewise, global rice production and consumption in 1991/92 are forecast down, with consumption posting the first decline since 1987/88. But world rice trade in calendar 1992 is forecast to rise modestly.

The outlook for world coarse grains is similar to wheat—declining production, use, and stocks. But unlike wheat and rice trade, world coarse grain trade is expected to drop. Major factors behind the expected reduction in world coarse grain trade are larger 1991 crops in Europe and parts of Latin America, increased competition from wheat for feeding in Korea, and the USSR's financial difficulties.

The same factors are responsible for a reduction in 1991/92 U.S. corn exports. In 1992, prospects for foreign coarse grain production will depend largely on USSR production and on whether China can continue to achieve the relatively high yields of the past 2 years.

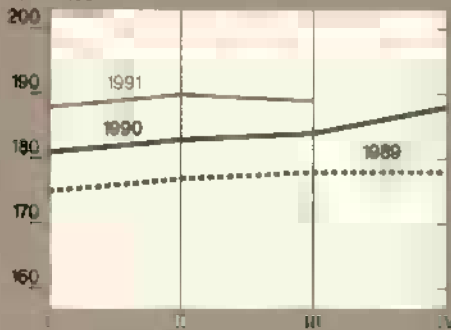
This issue of *Agricultural Outlook* was prepared before the dissolution of the Soviet Union and the emergence of former Soviet republics as a commonwealth of independent states.

Prime Indicators

Agricultural Economy

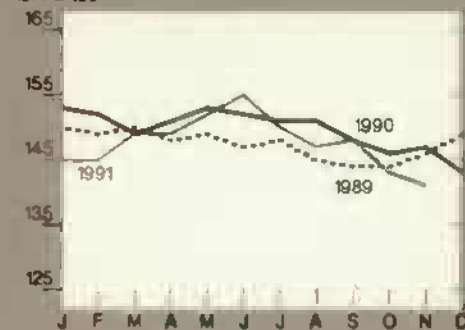
Index of prices paid by farmers

1977 = 100



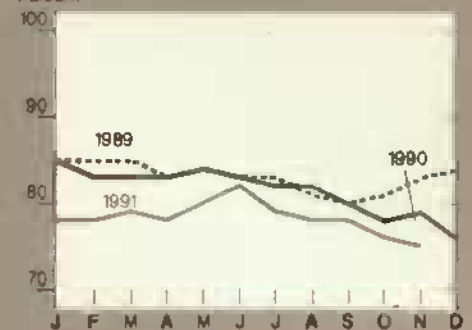
Index of prices received by farmers¹

1977 = 100



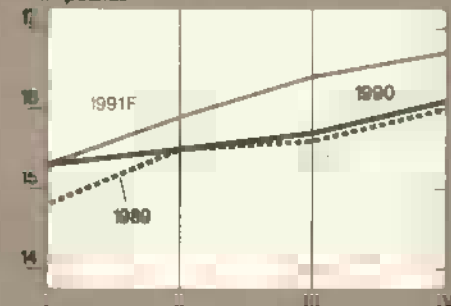
Ratio of prices received/prices paid

Percent



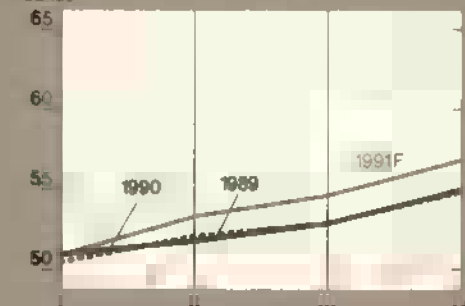
Total red meat & poultry production²

Billion pounds



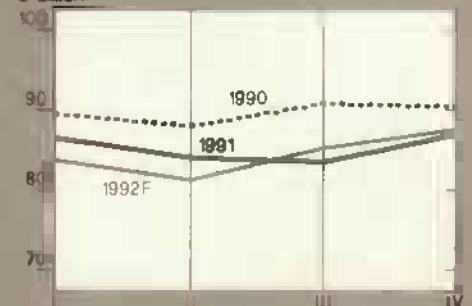
Red meat & poultry consumption, per capita^{2,3}

Pounds



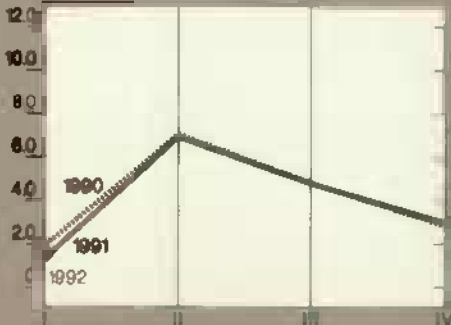
Cash receipts from livestock & products⁴

\$ billion



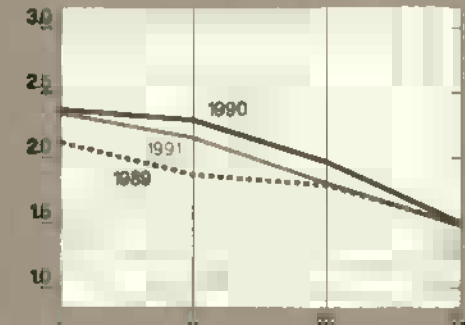
Corn beginning stocks⁵

Billion bushels



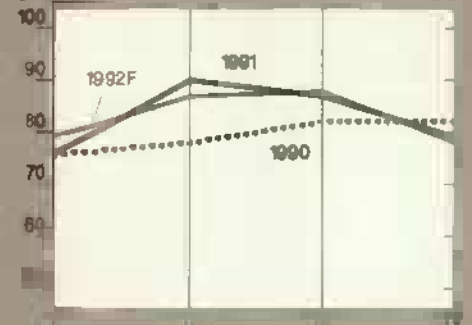
Corn disappearance⁵

Billion bushels



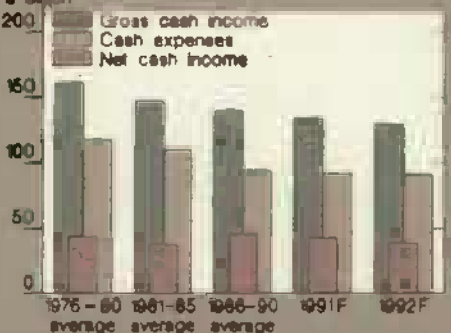
Cash receipts from crops⁴

\$ billion



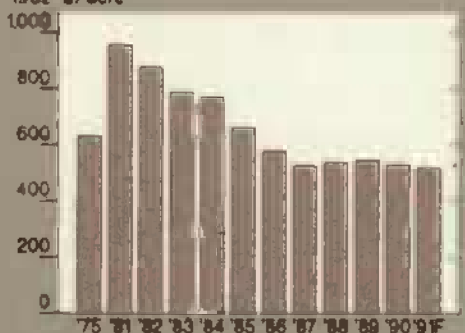
Real cash income⁶

\$ billion



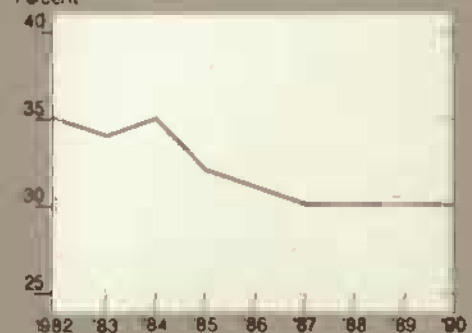
Average real value of farm real estate

1982 \$/acre



Farm value/retail food costs

Percent



¹For all farm products. ²Calendar quarters. Future quarters are forecasts for livestock, corn, and cash receipts.

³I=Sept.-Nov.; II=Dec.-Feb.; III=Mar.-May; IV=June-Aug. Marketing years ending with year indicated.

⁴Cash expenses plus net cash income equals gross cash income. F=forecast.

⁵Retail weight. ⁶Seasonally adjusted annual rate.

Agricultural Economy

Global oilseed supplies in 1991/92 are forecast at a record level, with most of the rise in soybeans and cottonseed. World soybean production will advance as Brazil's crop recovers from drought-reduced yields, and as the U.S. brings in a harvest forecast to be the fifth highest ever.

Record cotton production and near-record consumption, along with some stock rebuilding, highlight 1991/92 world cotton prospects. The U.S. will account for two-thirds of this season's gain in global production, followed by China and India. World cotton use in 1991/92 will increase about 1 percent, somewhat below the healthy growth rate of the past decade. So global trade will probably remain unchanged this season.

The world sugar market is expected to come into better balance in 1991/92. Global sugar production in 1991/92 is actually forecast down slightly from last year, and consumption will advance—driven by rising demand in developing countries, particularly in Asia. Production will likely exceed consumption, but the excess is forecast as less than 800,000 metric tons, compared with more than 3.5 million last season.

U.S. Grain Stocks Low But Meats Abound

The U.S. economy sputtered its way into the new year, with mediocre performance at the tail end of 1991 dashing hopes for a robust recovery. On the bright side, however, increases in most retail food prices will remain below the rate of increase expected for the overall Consumer Price Index (CPI), except for some fruits and vegetables. The U.S. enters 1992 with an abundance of red meat and poultry, a slashed supply of winter vegetables from a whitefly infestation, lower crops of wheat and some feed grains, a winter wheat crop off to a precarious start, and the lowest grain stocks in over a decade.

U.S. crop production was down about 2 percent in 1991/92, due to smaller planted acreage and weather-reduced yields. Acreage taken out of production under annual and long-term farm programs reached around 64 million acres,

up 4 percent from 1990. Altogether, 1991/92 U.S. grain production is down 10 percent from the previous year, following excess rain in some areas and too little in others during critical periods of crop development.

Total use in 1991/92 is expected to be about the same as the previous year and exceed production, leading to declining stocks. Ending stocks of U.S. grain are forecast at their lowest since 1975/76.

In 1992/93, U.S. crop acreage and production are likely to expand, as producers respond to higher prices and smaller acreage reduction requirements for grains, and if favorable growing conditions resume. For wheat and corn, a return to trend yields in 1992 would bring the combined average wheat and feed grain yield well above the 1991 level, slightly exceeding 1990. However, given the outlook for reduced wheat ending stocks this season, production would have to rise nearly 23 percent in 1992/93 just to keep wheat supplies at this year's level.

U.S. meat production in 1992 is forecast to increase more than 3.5 percent from 1991's record output. Beef, poultry, and pork output are all expected to rise, with strong gains in pork leading the way. Large supplies of all meats will also pressure prices lower, squeezing producer returns.

Overall, the 1992 outlook calls for dampened inflation, larger supplies of many foods, particularly meats, and a continued slow rise in food prices. Retail food prices are forecast to increase 2 to 4 percent, compared with slightly over 3 percent estimated for 1991.

Solid Trade & Income Prospects in 1992

Global commodity conditions point to expanded trade opportunities for U.S. wheat, rice, and animal products. Meanwhile, the mixed supply situation for U.S. commodities is likely to be mirrored in the farm sector's cash receipts and income performance for the coming year.

World wheat trade in 1991/92 is forecast up more than 10 percent, and rice trade in calendar 1992 will also expand. Later in the 1990's, world commodity consumption and trade are expected to respond to an easing of trade barriers and stronger economic growth. U.S. agricultural exports stand to gain, since U.S. producers will be competitive in world markets.

Stronger international markets will translate into an upswing in U.S. agricultural exports, with an expected value of \$39 billion in fiscal 1992, up about 4 percent from 1991. Higher grain prices and an increased volume of wheat, soybean, and horticultural exports will contribute to the increased value of exports. However, export growth will be tempered by larger supplies of a few commodities in competing or importing countries, especially corn and cotton. The combination of larger exports and smaller imports would boost the U.S. agricultural trade surplus to around \$17 billion, up 14 percent from 1991.

The global commodity and export outlook suggests total cash receipts to U.S. farmers in 1992 close to 1991's level. A modest increase is likely in production expenses, mainly because of greater outlays for energy, fertilizer, pesticides, and labor. The forecast would leave farmers with net cash income of \$52 to \$57 billion, compared with \$58 billion estimated for 1991. Net farm income is forecast at \$40 to \$46 billion in 1992, a range covering the \$44 billion expected in 1991.

Although 1992's income—both net farm and net cash—is likely to post a second year of retreat from 1990's record, signs of fundamental financial strength are evident in the sector. Less of farmers' cash income will go for interest payments to service debt, so that cash is available for other expenses or savings. And although improvements in asset value and equity are not expected to keep up with the forecast rate of inflation for the general economy, no severe financial stress looms on the horizon for most U.S. farmers. The farm sector balance sheet points to relative economic stability in 1992.

[James R. Donald (202) 720-6030] **AO**

Livestock Outlook



Red Meat Supplies Expand

Favorable returns for cow-calf operators and ample forage are stimulating the beef cow herd expansion. For 1992, the calf crop is expected to expand over 2 percent from 1991 to around 41.1 million head, the strongest expansion since 1980.

Cow-calf operators have had positive returns above cash expenses since 1986. Cash returns in the last 2 years were the highest since 1979. Returns are expected to decline in 1992 from recent high levels as stocker and feeder prices decline. The cyclic peak in the size of the cattle herd is not expected until the mid-1990's.

The supply of feeder cattle in coming months is expected to be tighter compared with the early 1980's. But feeder cattle supplies are expected to increase in 1992 and beyond, due to the expanding calf crop, continuing larger imports of stockers and feeders, and fewer calves slaughtered for veal.

Commercial cattle slaughter is expected to expand in 1992 to 33.3 million head, the first year-to-year increase since 1986. The greatest expansion is expected for

fed cattle in 1992. Fed cattle (steers and heifers that finish weight gain on a high grain ration diet), are expected to make up about 79 percent of the slaughter mix, while the reduced level of nonfed steer and heifer slaughter is likely to continue in 1992.

Beef production in 1992 is expected to increase about 1 percent from 1991, with average cattle dressed weights beginning to stabilize, following the increase of 17 pounds per head last year. Beef production in 1991 expanded solely due to incentives to market cattle at heavy weights, but these incentives are not expected to continue as strong in 1992.

Pork production in 1992 is projected at 17.2 billion pounds, carcass weight, exceeding the previous record of 16.4 billion pounds set in 1980. An abundant supply of pork processing meats at attractive prices is expected to compete increasingly with processing turkey meats. In recent years, some mixed-formula sausage products have expanded the use of turkey meat and displaced pork trimmings. Lean processing beef, mostly from cows, bulls, and imports, will be less directly impacted by the lower

priced pork trimmings and poultry processing meats.

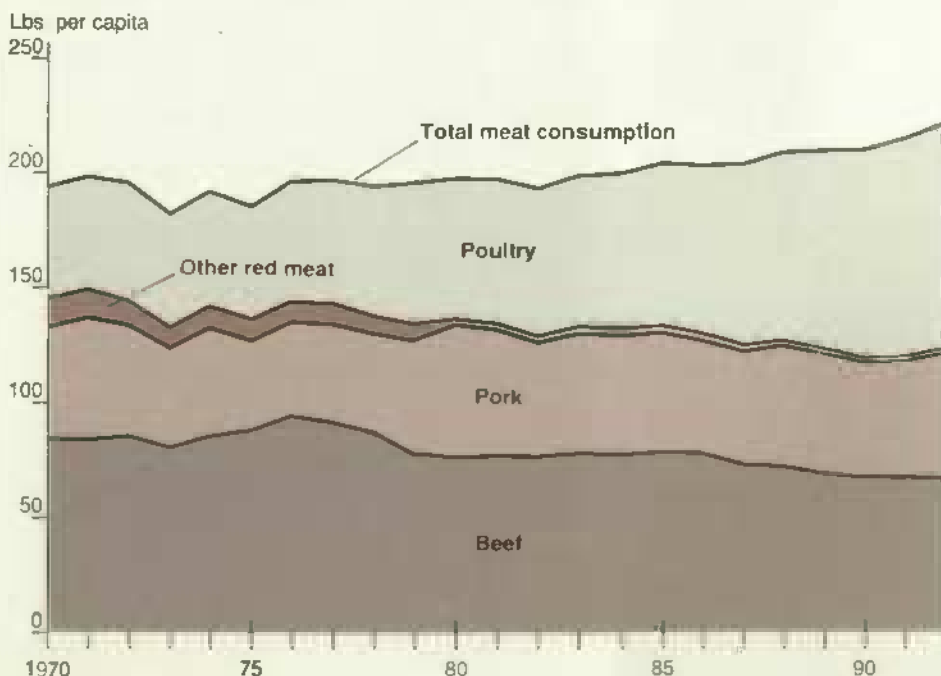
Beef Exports, Pork Imports Rise

Beef exports in 1992 are forecast to increase 8 percent above 1991, with most of the increase in shipments to South Korea, Mexico, and Canada. While Japan remains the principal U.S. market for beef exports, other markets are expanding more rapidly and increasing their share of U.S. beef exports.

U.S. beef imports are expected to decline again in 1992, perhaps 1 to 2 percent from 1991. And 1992 should see cattle imports down about 3 percent from 1991's record 2 million head. The largest number of imported cattle continues to enter from Mexico, mostly lightweight feeder steers. However, shipments from Canada have shown the greatest year-to-year increases recently.

Pork imports in 1992 are projected at around 885 million pounds, carcass weight, up 4 percent although still below 1990 and 1989. Pork imports from

Poultry Takes a Larger Share of Meat Consumption

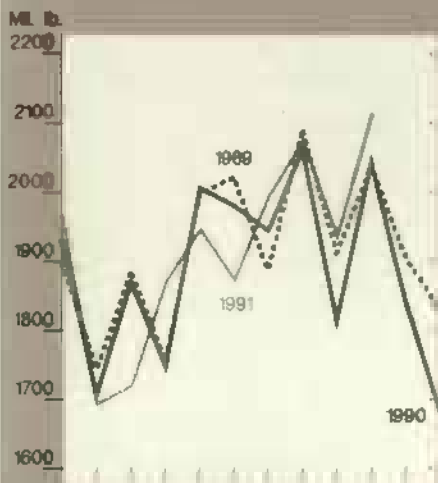


1992 forecast. Other red meat includes lamb, mutton, and veal.

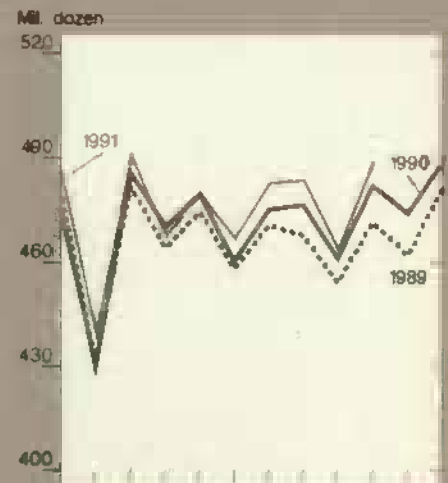
Livestock Outlook

Livestock & Product Output

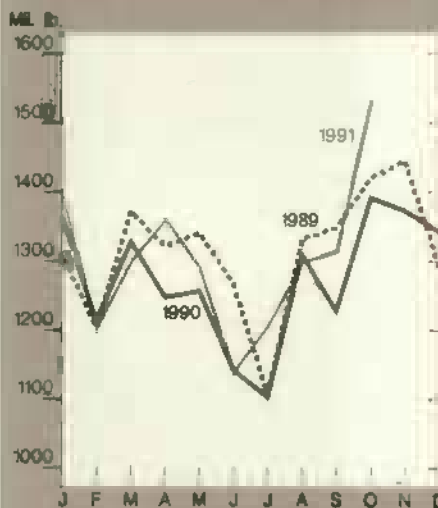
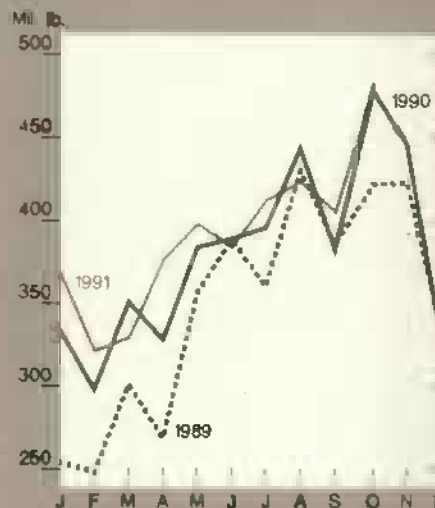
Commercial beef

Broilers¹

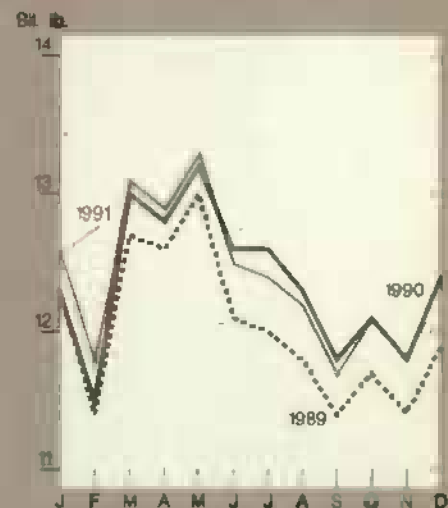
Eggs



Commercial pork

Turkeys¹

Milk



¹Federally inspected production, ready-to-cook.

Canada in 1992 are expected to increase, unless the dollar weakens. Little growth is expected for pork shipments to the U.S. from Denmark and Poland.

Retail Price Outlook— Pork Lower, Beef Steady

The sharp expansion in pork availability is expected to weaken retail pork prices in 1992. Pork prices could drop 10 percent from 1991, averaging \$1.90 per pound. Retail Choice beef prices are expected slightly below 1991's level, at about \$2.90 per pound.

For producers, Choice steer prices for Nebraska Direct (1,100-1,300 pounds), are forecast to average \$73-\$79 per cwt in 1992, compared with around \$74 in 1991. The record-high Choice steer prices in the low \$80's, seen in late 1990 through early spring 1991, are not expected to recur during 1992.

Feeder cattle prices are expected to decline from 1991's record of almost \$93 per cwt to average \$86-\$92 in 1992. Feedlot operators will likely lower their bids for feeder cattle to improve cattle feeding margins.

Barrow and gilt prices for 1992 are forecast to average \$39-\$45 per cwt compared with around \$49 in 1991, with the lowest prices expected during the second half of the year. Lower hog prices in 1992 will likely pinch feeding margins sufficiently to reduce pork production in 1993. [John Ginzel (202) 219-1286] **AO**

Coming in the March
issue of AO...

*Changing patterns of U.S.
rice consumption*

Little Increase In 1992 Milk Output

Assuming no changes to the dairy provisions of the 1990 farm legislation and a gradual economic recovery, dairy markets in 1992 are expected to see little expansion in milk production, slightly higher milk prices, and improved commercial sales of dairy products.

Expansion plans in 1992 probably will be conservative, primarily because income prospects are not very bright. Milk prices are expected to be low compared with most of the 1980's. On the other hand, debt-asset ratios probably will be low and a fairly large number of farms could take on some new debt in 1992.

In early 1992, continued high prices of feed concentrate and declining milk prices will erode most of the improvement in milk-feed price relationships expected for fourth-quarter 1991. Returns over concentrate costs are projected to drop almost 10 percent.

The relatively low returns expected in the first half of 1992 may result in larger numbers of farms exiting the industry. However, the exit rate is not expected to be as large as during early 1991, when low prices following 2 years of high prices precipitated substantial exit. For all of 1992, returns over concentrate costs are expected to be similar to 1991.

Steady Farm Milk Prices Expected

Average farm milk prices in 1992 are expected to change little from 1991. Although recovery in commercial use of dairy products is expected, dairy market tightness will lessen as production bounces back slightly through the year. Also, no recurrence of the 1991 market problems is expected. In 1991, the lack of milk moving between butter/powder plants and cheese plants as cheese mar-

kets tightened was one of the primary reasons for the increases in milk prices at a time when dairy product sales were sluggish.

Retail dairy product prices in 1992 may increase little. If wholesale and farm prices hold close to 1991 levels, retailers may be willing to absorb increases in marketing costs so as not to choke off increases in retail movement brought on by a recovering economy.

Smaller Milk Surplus

Commercial use of dairy products (milk equivalent, milkfat basis) in 1992 is forecast 2-3 percent above a year earlier. Expected economic recovery helps support such an increase over the recession-weakened levels of 1991.

At the beginning of 1992, total dairy product stocks (milk equivalent, milkfat basis), are expected below a year earlier. Estimated increases in commercial sales and smaller milk supplies in the second half of 1991 will draw down available stocks. Given the forecasts for increases in commercial use and little change in milk production from 1991, total stocks during 1992 should finish below year-earlier levels.

For calendar 1992, CCC net removals (milk equivalent, milkfat basis) of dairy products from the market under the price support program are forecast at 6 to 8 billion pounds. A relatively healthier economy is expected to stimulate commercial use, while the milk supply is forecast to increase little.

U.S. exports of dairy products in 1992 are expected to increase substantially from a year earlier. However, the majority of this increase will be achieved through the Dairy Export Incentive Program (DEIP). Although world prices of major dairy products have strengthened, strictly commercial U.S. exports are not expected to be very competitive.

[Sara Short (202) 219-0770] AO

Slow Growth for Broiler Industry

The broiler industry continues to expand after 8 consecutive years of profitability. Output in 1992 is projected to reach about 20.5 billion pounds, 4 percent higher than in 1991. In the past, the industry waited until profits were depressed before cutting back production. But the industry is now putting the brakes on output expansion after several years of 7-percent average growth and lower net returns each year.

Poultry will be challenged in 1992 by record protein supplies and a weak economy. Poultry consumption has grown steadily since the 1950's while red meat consumption has experienced periodic declines. Although supplies of red meat and poultry will reach records in 1992, squeezing broiler producer returns, the industry should be in relatively strong financial condition because of good to excellent net returns earned in recent years.

Turkey producers may not fare as well, however, as prices drop in a battle for market share. While poultry production is expected to continue increasing in the next few years, the rate of growth will moderate as expanding supplies of competing meats depress prices. Relief might be sought by expanding exports.

Whole broiler prices in 1992 are expected to average 47-53 cents per pound as increased poultry and red meat production keeps strong downward pressure on prices. But much of U.S. broiler output is sold in forms other than whole bird. Prices for broiler parts are expected to continue relatively flat into 1992; ample supplies of alternative meats, especially for fast food use, are among the reasons.

Prices for drumsticks, leg quarters, and thighs are expected to average below year-earlier levels well into 1992, unless large export sales of dark meat resume. Removing a large quantity of dark meat from the U.S. market helps support

Livestock Outlook

It Helps To Know...

The livestock and poultry sectors use an array of specialized terminology that may be unfamiliar to some AO readers. Animal terms used in the livestock and poultry sectors generally refer to the age or sex of animals, and whether they are intended for breeding, destined for a feedlot, or kept on forage for feed. Egg production terminology mainly distinguishes between production for food and for flock expansion.

Cattle:

Heifers and cows—young and mature females

Bulls—male breeding stock

Steers—castrated males

Feeder cattle—young stock eventually destined to finish gaining weight in commercial or on-farm feedlots

Stocker cattle—stock that gain additional weight on forage prior to placement in feedlots

Fed cattle—stock ready for slaughter that have been fed a high grain ration diet (in 1992, fed cattle may make up about 79 percent of all cattle slaughtered)

Nonfed cattle—stock that do not enter feedlots prior to slaughter, but are kept on forage for feed

Feedlots—farm or commercial operations (some large commercial operations can feed up to 100,000 head at a time) that place the 600-800-pound feeders in pens and feed them a high grain ration diet composed primarily of a concentrate feed (often corn), protein supplement (such as soybean or cottonseed meal), and some roughage (from silage or hay)

Feedlot placements—the inventory of cattle in feedlots at a reported time

Finishing—the last stage of production before the cattle emerge from the feedlot and are sent to beef packing plants (the term "overfinishing" generally means cattle have excessive fat-to-lean ratios, and these cattle are often price-discounted)

Hogs:

Gilts and sows—young and mature females

Boars—male breeding stock

Barrows—young castrated males—about 95 percent of slaughtered hogs are barrows and gilts

There are three types of hog enterprises: farrow-to-finish, feeder-pig, and feeder-pig finishing

Farrow-to-finish operations—includes all phases of slaughter hog production

Feeder-pig production—production of pigs and sale of weaned pigs to others for finishing; in this operation, labor is the dominant input cost

Feeder-pig finishing—feeding weaned pigs to final weight before slaughter; feed costs dominate input expenses

Poultry:

Table eggs—typically unfertile eggs for consumption

Hatching eggs—eggs used in broiler production.

Table-egg flock—produces eggs for consumption (table eggs)

Hatching flock—breeding stock that produces hatching eggs and some table eggs

Chick placements—number of chicks raised for broiler output

prices of both parts and whole birds. Exports to the USSR were down nearly 50 percent in 1991 from a year earlier, and dark meat parts prices have been below year-earlier prices since February 1991.

Barring major changes in feed costs, returns to processors for sales of whole birds are expected to average about 3-4 cents per pound in 1992, compared with 5-6 cents in 1991.

Changing Structure Reshapes Industry

Integration and concentration in broiler production will continue to increase through the 1990's, affecting poultry's profitability. Concentration is reaching levels at which a few firms can greatly affect the entire industry.

According to industry publications, one firm now controls 20 to 25 percent of production (weekly ready-to-cook, or RTC, basis). The top four broiler firms account for about 45 percent, compared with 23 percent in 1980.

Although broiler prices have declined consistently over time (measured in constant dollars), production has remained profitable because increased efficiency has lowered costs. Future increases in efficiency will likely be in functions such as marketing, with new product development and export promotion, and in processing, including better use and marketing of by-products.

New markets for poultry have been created as supermarkets add takeout and deli cases to take advantage of a growing demand for food requiring little preparation. The supermarket deli sector is expected to expand more than 6 percent in 1992.

Other away-from-home food purchases, such as fast food and other restaurant and food service, are expected to increase at a slower rate than in the past. In 1987 about 11 percent of broilers moved through fast food channels; by 1991, fast food outlets accounted for about 25 percent. According to industry estimates, away-from-home consumption accounts

for 30 to 35 percent of RTC broiler production.

Turkey Producers' Hopes Dim for Bright 1992

Growth of 3 percent in 1991 was the slowest rate of increase for turkey production since 1984's 1.3 percent. Output growth for all of 1992 is expected to be a repeat of 1991, with an increase to about 4.8 billion pounds.

The turkey forecast for 1992 is more uncertain than usual at this point due to large losses experienced when prices dropped sharply in the fourth quarter of 1991. Record turkey stocks, large increases in red meat production, and continuing increases in turkey and broiler output combined to undermine fall turkey markets. Prices for whole turkey dropped to well below breakeven, and producers could lose as much as 6 cents per pound on fourth-quarter sales and 2 cents for the entire year.

While turkey producers have not seen healthy profits since 1986, only once since 1972 have returns in the fourth quarter been strongly negative. The large losses are especially difficult for the turkey industry, as much of each year's whole-bird production is priced during October and November. Producers sell about 70 million turkeys for Thanksgiving and Christmas. Much of the frozen whole-bird sales made earlier in the year are sold at prices tied to the markets of the holiday season, as are contracts for fresh turkeys.

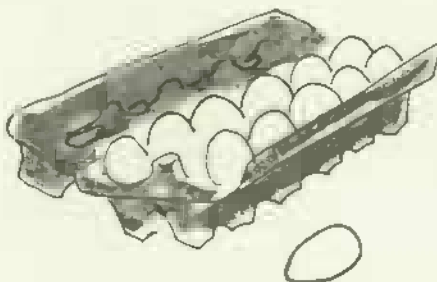
Producers had expected to enter 1992 with relatively low stocks and strong prices, and production plans for the first quarter were implemented before the market weakened. But the losses of 1991 will alter production plans for later in 1992, and the year's growth could be even less than the 3 percent currently forecast.

Turkey Prices To Fall, Net Returns To Suffer

Prices for whole turkey are expected to enter 1992 below break-even levels and then follow typical seasonal patterns, rising gradually to average higher in the second half of the year than in the first. Prices are expected to remain below break-even until the second half due to seasonally slower demand, record carryover stocks, and large supplies of competing meats. For 1992 the price of Eastern region hen turkeys is forecast to average 57-61 cents per pound, compared with 59-61 cents in 1991.

Returns to processors for whole-bird production provide one indicator of industry profitability. Returns for 1992 are expected to be strongly negative during the first half of the year, but should recover to slightly profitable levels during the second half, particularly if producers curtail expansion plans from current expectations.

Historically, producers reacted to losses by reducing supplies the following year. However, in recent years the industry has continued to expand despite 5 years of poor returns. Since much of the growth has been in further processed products, it is possible that returns for whole-bird production are not as reliable an indicator of output response for the industry as in the past.



Egg Production Steady in 1992

Table-egg production is expected to hold steady in 1992 following a 1-percent rise in 1991. Hatching-egg production will increase 4-5 percent to maintain broiler expansion, and will contribute to an increase in total egg production of about one-half percent.

The egg industry has experienced an unprecedented 3 years of uninterrupted profitability, which is expected to continue in 1992 if production remains restrained. In 1988 the industry responded to the worst net returns on record by drastically cutting output to better balance supply and demand. Table-egg output was cut sharply for about 2 years, resulting in the highest net returns on record. Output began creeping upward almost immediately in response to higher returns, but the egg industry demonstrated uncharacteristic restraint by increasing output less than 1 percent in 1991.

Imports for 1992 are expected to increase fractionally and exports to decline slightly. In 1991, exports increased substantially while imports dropped, both in response to lower domestic prices for shell eggs and egg products. In addition, export of shell eggs under the Export Enhancement Program increased.

Prices for New York large, white carton eggs in 1992 are forecast to decline slightly from 1991's 78 cents per dozen, to 73.77 cents for the year. Small production increases have eroded prices from the record highs achieved in 1989 and 1990, and increasing supplies of alternative proteins will pressure prices downward. Producers are likely to average returns of 10 cents per dozen in 1992, down 2 cents from 1991.

[Susan E. Buhler (202) 720-7693] **AO**

Field Crops Outlook



Wheat Crop Crucial with Stocks Tight

The 1991/92 estimated U.S. wheat crop is the second smallest since 1978. A combination of winter-kill, disease problems, and a 15-percent acreage reduction program (ARP) resulted in harvested acreage and yields lower than 1990/91. Current estimates show the largest year-to-year U.S. production decline since 1866, the first year of USDA records.

Much lower wheat supplies and total use similar to 1990 are heading the U.S. wheat market toward sharply lower stocks. Projected 1991/92 ending stocks, at 414 million bushels, would be the lowest since 1974 and the second lowest since 1952.

For 1991, beginning stocks were large and partially offset lower production. For 1992, production will have to increase if low beginning stocks are to be offset. Assuming forecast beginning stocks and the same level of imports as in 1991, production in 1992 will have to increase by 451 million bushels just to stay even with 1991's low supplies.

Lower ARP To Boost 1992 Wheat Output

Two changes in the 1992 wheat program are expected to influence producers' planting decisions significantly for 1992—the reduced 1992 ARP of 5 percent and the unavailability of the 1991 winter wheat option. The 1992 target price (unchanged at \$4 per bushel), and the 1992 announced loan rate (\$2.21 per bushel—\$0.17 higher than 1991's) are unlikely to have much effect on production.

At 5 percent, the 1992 ARP is 10 percentage points below 1991. As a general rule of thumb, every 5-percentage-point reduction in the wheat ARP leads to an increase in planted wheat acres by roughly 2.5 to 3 million acres. Other things equal, this would suggest an increase of roughly 5 to 6 million planted wheat acres in 1992. However, higher-than-normal replantings of white wheat in the Pacific Northwest in 1991, as well as other considerations, will likely limit the year-to-year increase to 3-5 million planted acres.

Other probable factors affecting planting involve "planting flexibility," a major change in program provisions from previous years. Producers participating in the 1991 standard wheat program could plant more wheat without violating government program contracts. Regardless of plantings, however, producers received deficiency payments on fewer acres.

Flexibility affected only about half of wheat producers in 1991 since a special option for winter wheat producers had different rules. But the 1991 winter wheat option is not available in 1992, and all participating wheat base acres will be covered by flexibility provisions.

If longrun trends hold, about 87 to 88 percent of acres planted will be harvested. Then the year-to-year gain in harvested acres would be greater than for planted acres because 1991's harvested-to-planted ratio at 83 percent was lower.

A return to national trend yields in 1992 would increase production significantly because 1991's estimated national yield was 3 to 4 bushels below a simple trend-yield. Given rough projections of 1992 harvested acreage, a 3-bushel increase in the national average yield is roughly equal to production on 5 million harvested acres.

Winter Wheat Off To a Poor Start

The winter wheat crop did not have a promising start last fall, however. Kansas, typically the largest wheat-producing state, had a dry fall in 1991. Through October 26, the period when Kansas' 1992 wheat crop should be establishing itself, parts of the state went over 40 days without measurable precipitation.

Although the 1992 weather outlook is uncertain for Kansas, substantial precipitation has occurred since late October. Through November, Kansas' crop conditions had improved somewhat. While 58 percent of the Kansas wheat crop was rated poor to very poor in early November, by the end of November, 46 percent of the crop was in these categories. Emergence was also a problem in Kansas, with only about 85 percent—rather than the average 98 percent—of winter wheat having emerged by the end of November.

Weather and its impact on U.S. production is probably the most uncertain factor on the supply side of the U.S. wheat balance sheet for 1992/93. On the demand side, uncertainties in the 1992/93 U.S. wheat market stem mainly from global factors—the economic, financial, and political conditions in the USSR, the availability of U.S. financial assistance, and weather in other countries. Weather will also affect the availability and prices of corn and other feed grains, especially next summer, and this in turn will affect U.S. wheat feed use for 1992/93.

[Craig Jagger (202) 720-7923] AO

Flexibility Provisions Add Uncertainty to Wheat Crop

Aside from the lower ARP announced for the 1992 wheat crop, other factors can influence 1992 acreage, including weather, program participation, new flexibility provisions, relative crop returns, decisions by nonparticipants in farm programs, and factors such as incentives for haying or grazing.

Expected market returns have become more important to program participants because of program flexibility provisions that were new for some producers in 1991. Under the flexibility provisions, 15 percent of a producer's wheat or other base acres (called Normal Flex Acres or NFA) will not receive deficiency payments, whether the acres are planted to wheat, planted to another crop, or idled.

To compensate for the loss of payment acres, producers can plant most other program or nonprogram crops on wheat NFA without losing wheat base. Producers can also plant wheat on NFA of other crops and still be in compliance with the wheat program.

In effect, flexibility provisions allow individual producers who participate in the wheat program and who have NFA acres for other crops to adjust wheat acreage independently of ARP levels. The ability to increase wheat acreage while earning deficiency payments should help keep participation rates in the wheat program high.

Wheat acres covered by NFA provisions are expected to double to about 10 million acres in 1992, as coverage expands to include acres enrolled in the 1991 winter wheat option. Based on the 1991 *Final Enrollment Report*, about 2.1 million acres of other crops were planted on wheat base in 1991, and 400,000 acres of wheat were planted on other crop bases. Thus, the net impact of NFA provisions on crop switching is an indicated 1.7 million acres of other crops

planted on wheat base. In addition, an unknown number of wheat base acres was likely idled due to NFA provisions.

Evidence can be marshalled to support arguments for increases or decreases in wheat plantings on NFA, or by nonparticipants (who face similar incentives). Evidence suggesting increased plantings of wheat on NFA or nonparticipant acres emphasize relatively larger expected returns for 1992 and a continuation of established crop rotations. Wheat prices have increased significantly—both absolutely and relative to other crops—since their July 1991 harvest-time lows.

For winter wheat producers, prices in August and September 1991 were higher than 1990, while corn and soybean prices were lower. Wheat prices trended downward during 1990, and upward in 1991. In addition, spring wheat prices are likely to be higher this spring than a year earlier.

Evidence supporting reduced plantings of wheat on NFA or nonparticipant acres points to changes not related to market prices. Producers in some soft red winter wheat areas have had 2 years of poor yields from disease or winterkill problems and may have lowered their expected yields and actual plantings. Winter wheat producers in parts of the southern Plains, who faced very poor planting conditions during the fall's major planting months, may have idled more wheat land than normally.

A combination of the loss of fall grazing, uncertain yield prospects, and the first-year loss of deficiency payment returns under NFA likely convinced some producers to plant less wheat. Producers in marginal continuous cropping/summer fallow regions especially may fallow some of their poorer land because of the loss of deficiency payment returns.

Although it is unclear whether wheat planted on NFA will increase or decrease from 1991, wheat plantings in 1992 likely will continue the pattern indicated by the 1991 enrollment report—less wheat planted with flexibility provisions than would occur without flexibility provisions. The loss of deficiency payments on flex acres is expected to cause lower wheat acreage and thereby temper the expected increase in wheat acres caused by the ARP reduction.

Other program provisions may also affect producers' wheat planting decisions. For example, under the 0/92 program, producers who idle additional base acres can receive deficiency payments on a portion of the idled acres.

Provisions new in 1991 allow producers to plant minor oilseeds on 0/92 acres and receive their choice of either 0/92 wheat payments or marketing loans for minor oilseeds. The 0/92 program is especially attractive for wheat producers facing poor planting conditions (as some southern Plains producers did this fall).

It is also attractive to wheat farmers who plant crops that later fail, want to graze wheat, expect the 0/92 guaranteed deficiency payment rate to be large, or expect that loan guarantees or prices for minor oilseeds will be attractive relative to wheat prices. An indicated 0.3 million acres of minor oilseeds was planted on wheat 0/92 acres in 1991.

The crediting of acres to 0/92 under NFA provisions effectively requires producers to either idle their NFA acres or to plant them to a crop other than wheat. Over 5 million wheat base acres were credited to 0/92 in both 1990 and 1991.

Field Crops Outlook

Lowest Feed Grain ARP Since 1981

U.S. feed grain production in 1991/92 is down more than 5 percent from the previous year, and the current forecast for ending stocks on September 1, 1992 of 39 million tons is the lowest level since 1976/77. Corn ending stocks of 1,234 million bushels would be the lowest since 1983/84.

The tighter feed grain situation led Secretary Madigan to announce the 1992/93 acreage reduction program (ARP) for feed grains at the lowest rate since 1981—5 percent for corn, sorghum, and barley. The 1991/92 ARP for these feed grains was 7.5 percent.

Target prices during 1992/93 are \$2.75 per bushel for corn, \$4.66 per cwt for sorghum, \$2.36 per bushel for barley, and \$1.45 per bushel for oats. Loan rates for feed grains will increase, due to higher average market prices over the preceding 5 years (loan rates are calculated as a moving average of the previous 5 years' market prices, excluding the highest and lowest prices). For corn, the 1992/93 loan rate is \$1.72 per bushel; for barley, \$1.40; oats, \$0.88; and for sorghum, \$2.91 per cwt.

The 1990 farm act introduced a new dimension of planting flexibility, which could significantly influence total acreage planted to feed grains in 1992. (For more on the flexibility provisions of the 1990 farm act, see the box in the wheat outlook.) This flexibility allows farmers to plant other program crops or approved nonprogram crops on 15 to 25 percent of base acres without reducing the base. However, the flex acres are not eligible for deficiency payments, so relative market returns play an important role in planting decisions for these acres.

Another factor that could influence the acreage planted to corn and other feed grains is the progress of Southern Hemisphere crops, which are just now being

planted. Adverse weather in the Southern Hemisphere in the coming months could reduce potential crop yields, lead to expectations for tighter world supplies, raise expected prices for U.S. farmers, and ultimately result in more U.S. acreage planted to corn and other feed grains.

While the situation could change between now and spring planting time, current expectations of participation in feed grain and other setaside programs, as well as nonprogram plantings, suggest an increase of 1-3 million acres in corn area planted, to approximately 77 to 79 million. If 1992 yields return to a trend level of 119 to 120 bushels per acre, the U.S. corn crop could rebound to a range of 8.2-8.5 billion bushels. And with current forecasts for corn carryover at 1.2 billion bushels, corn supplies in 1992/93 could climb to 9.4 to 9.7 billion bushels.

On the demand side, the food and the feed, seed, and industrial sectors may experience stronger growth in 1992/93 with potential improvement in the general economy. Higher meat output is expected to continue, although at a somewhat slower pace. However, a possible liquidation in the hog sector would reduce feed requirements for that sector. Weather and export assistance—particularly financial assistance for the Soviet Union—will likely be the major factors determining foreign demand for U.S. corn exports in 1992/93.

If 1992/93 total corn disappearance is similar to last year, 1992/93 ending stocks could increase to 1.7-2 billion bushels. These stocks would imply a stocks-to-use ratio between 22 and 26 percent and would suggest lower corn prices in 1992/93. The average farm price for 1991/92 is currently projected to average between \$2.20 and \$2.60 per bushel.

Since weather was a major factor in the 1991 corn crop, it is important to consider the prospects for 1992 if a repeat of this year's weather were to occur. With the same yields as 1991—about 109 bushels—and slightly higher acreage because of the lower ARP, the 1992 corn harvest would range between 7.5 and 7.8

billion bushels, and corn supplies would range between 8.7 and 9 billion.

In this scenario, if 1992/93 use is also a repeat of 1991, ending stocks of corn would tighten to a range of 1 to 1.3 billion bushels, and the stocks-to-use ratio would range between 13 and 17 percent, bracketing the stocks-to-use ratio of 16 percent currently estimated for 1991/92. [Tom Tice (202) 219-0840] **AO**

World Grain Stocks Low In 1992

Grain production, consumption, and trade patterns are undergoing major changes in many countries, the result of specific policy reforms or by-products of other developments. Some events, such as those now occurring in the Soviet Union, will have an immediate impact on world markets, while the impact of others will be evidenced over the next few years.

World grain stocks at the start of the 1992/93 marketing year will be relatively low. Thus, prospects for the 1992 crop take on even greater importance for grain consumers. Global stockpiles could quickly shrink to their lowest level since the mid-1970's should 1992 witness a significantly reduced world grain crop.

Although grain prices are still below levels of this time 2 years ago when ending stocks were the smallest since 1980/81, wheat prices have strengthened worldwide in recent months. This could send a positive signal to grain farmers to expand production. However, grain farmers in several key producing countries, including China, the USSR, and the EC, are effectively insulated from world price movements by their agricultural and exchange rate policies.

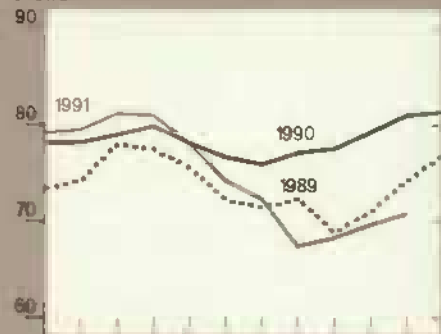
In the past, producers in countries such as Canada, Argentina, and Australia have been more responsive to strengthening prices. However, Canadian grain area is

Commodity Market Prices

Field Crops Outlook

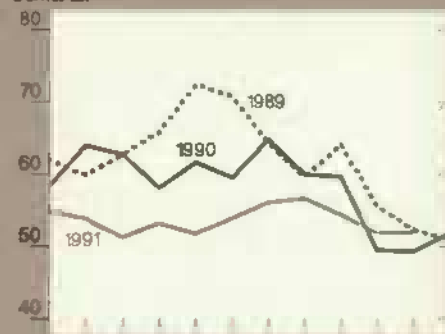
Choice steers, Nebraska

\$/cwt

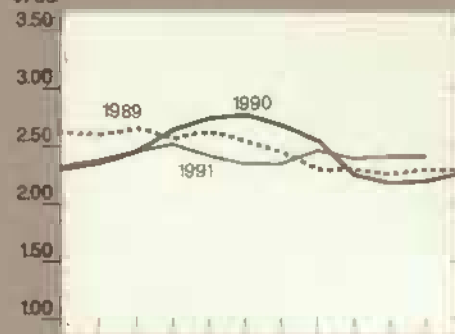


Broilers, 12-city average

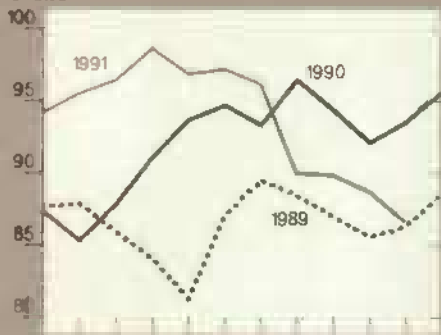
Cents/lb.

Corn, Central Illinois¹

\$/bu

Medium steers, Oklahoma City²

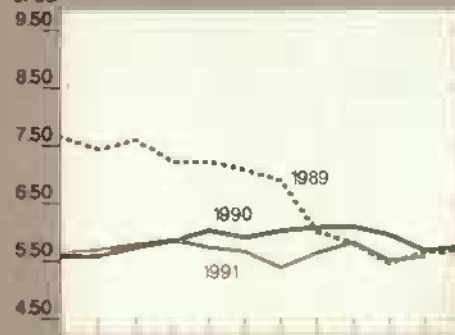
\$/cwt

Eggs, New York³

Cents/doz.

Soybeans, Central Illinois⁴

\$/bu

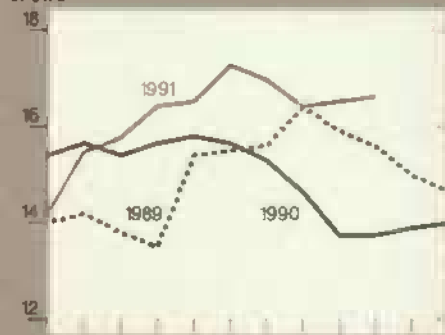


Barrows and gilts, 7 markets, Omaha

\$/cwt

Milled rice, SW Louisiana⁵

\$/cwt

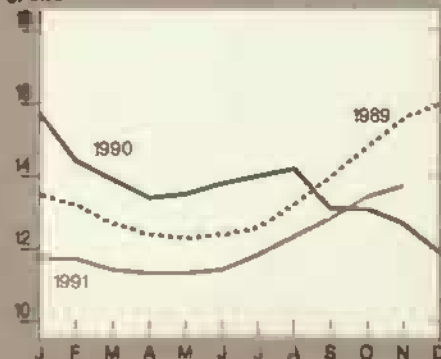
Wheat, Kansas City⁶

\$/bu



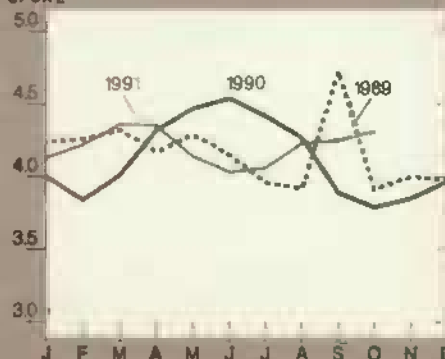
All milk

\$/cwt



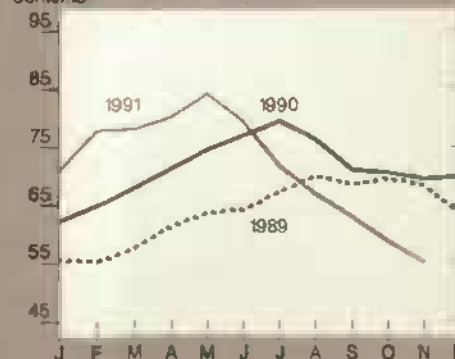
Sorghum, Kansas City

\$/cwt



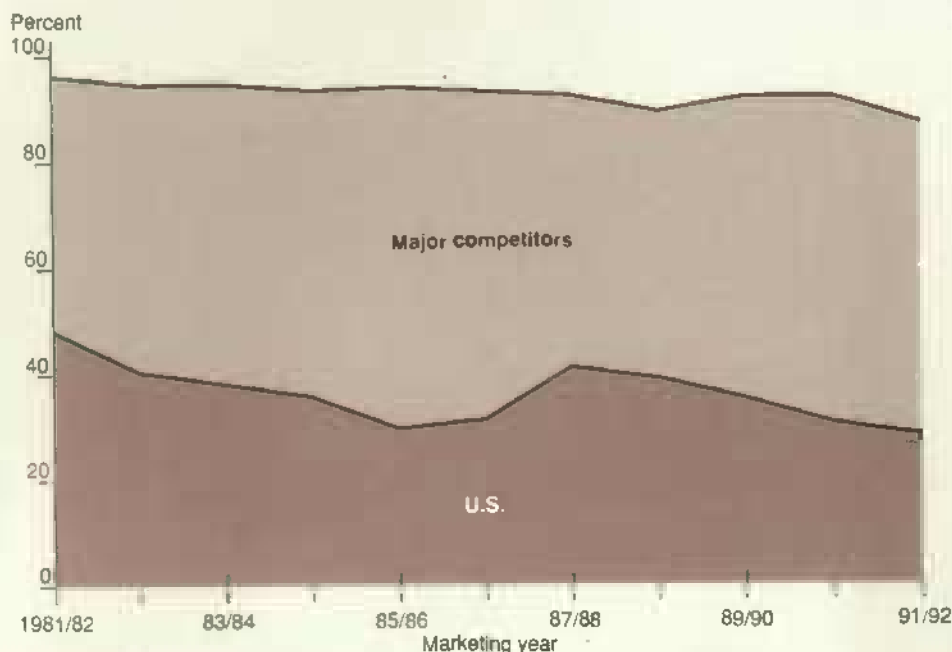
Cotton, average spot market

Cents/lb

¹No. 2 yellow. ²600-700 lbs. medium no. 2. ³Grade A large. ⁴No. 1 yellow. ⁵U.S. No. 2 long-grain. ⁶No. 1 HRW.

Field Crops Outlook

U.S. Wheat Market Share May Drop to 10-Year Low



1990/91 preliminary; 1991/92 projected.
Competitors include the EC, Canada, Australia, and Argentina.

already quite large, limiting the potential for further expansion.

The lower acreage reduction program (ARP) levels for U.S. wheat and feed grains for 1992, along with some improvement in world grain prices, would bring a modest increase in world grain area in 1992, the first significant upturn since 1989.

Turning to production, it would take outstanding yields in 1992/93 to duplicate conditions of the 1990/91 marketing year. In that year, world wheat and coarse grain production soared to a record 1.43 billion tons, exceeding use by more than 32 million tons and resulting in a significant increase in world stocks. The 1990/91 marketing year was the only recent season when the world was able to add to grain stocks.

Some concern already exists about conditions of the 1992 winter wheat crop in parts of the USSR and China, and in the U.S. Great Plains. A number of events could still make or break the 1992 grain crop before combines move into the fields later this spring.

As usual, weather conditions will be a major influence on the size of the world wheat crop. With favorable weather, especially in the USSR, the 1992 wheat crop could exceed use and allow some rebuilding of world wheat stocks. If the world wheat crop is larger in 1992/93, consumption should increase. Wheat is likely to continue to be priced attractively as a feed ingredient in many countries, and food use of wheat should continue its historic upward trend.

A preliminary review of wheat trade prospects for 1992/93 is heavily dependent on imports by the USSR and China. Wheat import demand is expected to grow in the Middle East, while demand for milling quality wheat will continue strong in Asia. Imports of wheat for feed will again depend on the level of wheat prices relative to coarse grains. The major uncertainty lies with USSR imports. If wheat outturn in the USSR returns to a more normal level, the Soviets' 1992/93 import requirements would likely shrink.

Export competition is again likely to be intense, as wheat supplies of major exporters could well be as large or larger than in 1991/92. Stocks in Canada and

the EC at the beginning of 1992/93 will be extremely large, putting additional pressure on those two countries to move wheat if there is a large 1992 crop.

Looking ahead, prospects for world wheat markets will be influenced by key factors, such as:

- record EC wheat production, burdensome stock levels, and a willingness to subsidize wheat aggressively on world markets—maintaining downward pressure on world wheat prices, even with a tightening of world stocks;
- the likely continued aggressiveness of Canada in the world wheat market, given its large stocks and record crop;
- import demand from many countries with hard currency shortages and dependency on credit programs, with the Soviet Union receiving the most attention.

Grain Use, Output Up

The preliminary outlook for coarse grains in 1992/93 features prospects for a larger crop, some increase in utilization from 1991/92, and some possible increase in stocks.

World coarse grain trade for 1992/93 will likely be modest, but like wheat, the level of trade will hinge largely on USSR imports. A larger USSR grain crop would likely lead to some decline in USSR imports. While coarse grain import demand in North Africa and Latin America will depend largely on 1992 production, any increase in coarse grain imports by South Korea will depend on the delivered price of corn relative to wheat for feeding. A larger U.S. coarse grain crop could intensify competition in the world market.

World coarse grain production during 1991/92 is currently estimated at around 800 million tons, over 30 million below 1990. Major production declines are expected in the Soviet Union, the U.S., and China.

The smaller world coarse grain crop in 1991/92 is expected to draw down global stocks by nearly 7 million tons, with the bulk of the decline in stocks expected in the U.S. and the USSR. World coarse grain stocks levels as a percentage of total utilization will also decline.

The current season's world trade is projected to decline again and, at slightly over 83 million tons, would mark the second-lowest trade total in the past 15 years. A relatively low level of prospective USSR imports is a key factor in the stagnant outlook for world coarse grain trade. Small declines are projected in world corn and sorghum trade, while barley is projected up slightly.

In some countries, reduced imports reflect improved domestic crops, but in other cases the decline reflects continued competition from the feeding of wheat. Most major competitors are expected to increase their coarse grain exports in 1991/92, and China's exports are forecast to be record high. Consequently, U.S. exports in 1991/92 are forecast down 9 percent from last year, which was off 25 percent from 1989/90.

World coarse grain consumption is expected to be down again in 1991/92—mainly reflecting the USSR situation. Developments that will influence the world coarse grain market include the following:

- If there is another bumper world wheat harvest next year, several countries are likely to offer wheat at highly competitive prices relative to coarse grains—continuing to displace coarse grains in major markets like South Korea.
- Coarse grain import demand from the Soviet Union will continue to be impacted by the Soviets' hard currency shortage and dependency on financial assistance.
- Improved corn harvest in Eastern Europe after last year's drought-impacted crop, and declining demand linked to the reduction of consumer subsidies, will sharply lower the region's coarse grain import needs and likely even stimulate corn exports.

- Large consecutive harvests of corn in China have greatly increased the country's exportable corn supplies. Corn exports for 1991/92 are forecast to approximate last year's record 6.6 million metric tons. Limited storage facilities and a need for hard currency will keep China an aggressive export player in the market.

[Frank Gomme (202) 720-7700] **AG**

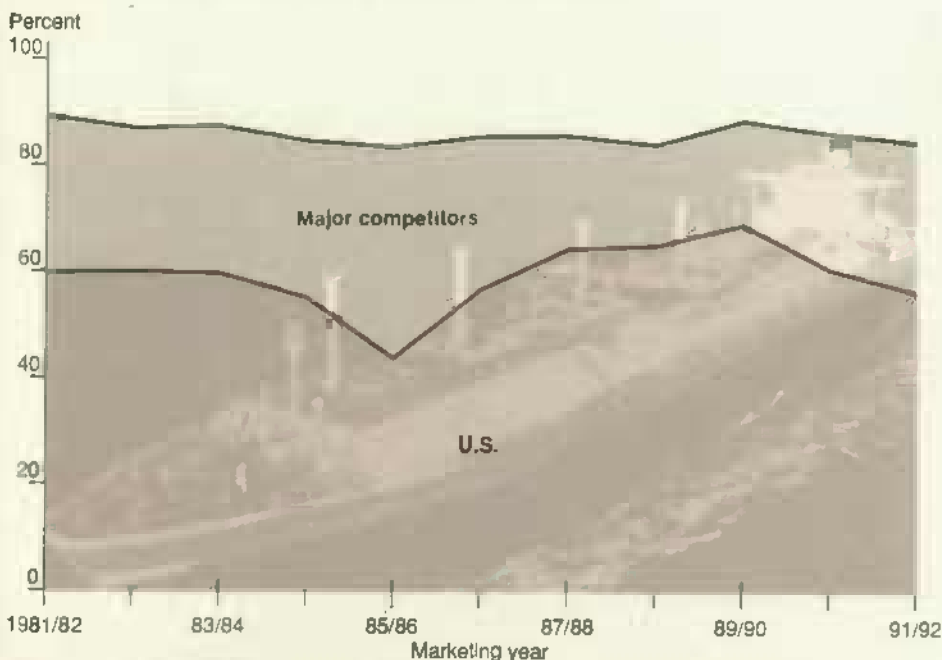
What Year Is This?

The outlook for a commodity is generally reported in marketing years. A marketing year straddles two calendar years, and is identified by a combination such as 1991/92.

For most crops, the marketing year begins around harvest time. The 1991/92 rice crop, for example, refers to the crop that is harvested in late summer and early fall 1991, and marketed through 1992. Unless otherwise indicated, the phrase "1991 crop" refers to the crop harvested in the 1991/92 marketing year.

Different crops have different marketing years, and the marketing years vary across countries. World totals, reported in the appendix tables, are sums of individual country figures, so they do not represent a uniform year. In the U.S., the marketing years for the major field crops begin: June 1—for wheat, barley and oats; August 1—for rice and cotton; September 1—for soybeans, corn, and sorghum; October 1—for soymeal and soyoll.

U.S. Coarse Grains Still Dominate Stagnant World Trade



1990/91 preliminary; 1991/92 projected.

Competitors include China, Thailand, Canada, Australia, Argentina, and South Africa.

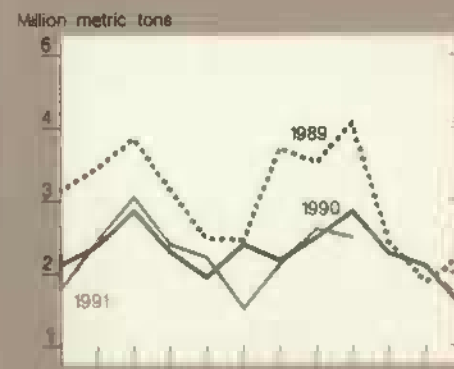
Field Crops Outlook

U.S. Trade Indicators

U.S. agricultural trade balance



U.S. wheat exports



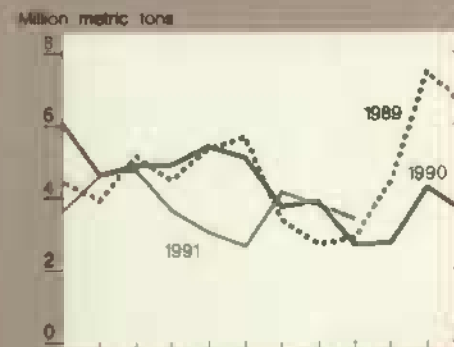
Export volume



Index of export prices



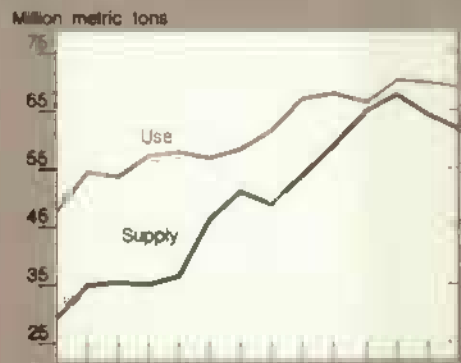
U.S. corn exports



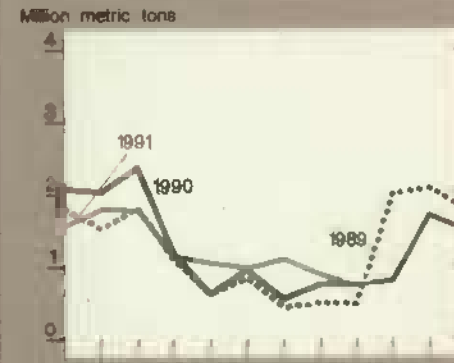
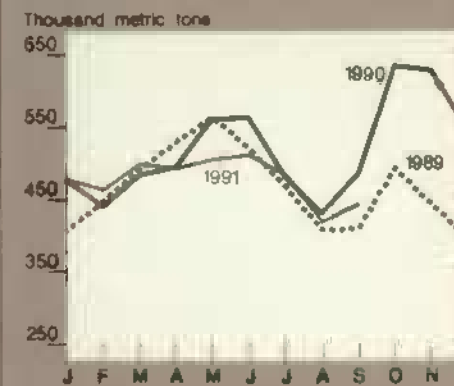
Foreign supply & use of coarse grains



Foreign supply & use of soybeans



U.S. soybean exports

U.S. share of world coarse grains exports^{1,2}U.S. share of world soybean exports^{1,2}U.S. fruit & vegetable exports³¹Excluding intra-EC trade²October-September years³Includes fruit juices

Oilseeds Face Strong Competition

In 1991, U.S. oilseed producers turned out the largest soybean crop in 6 years, the largest cottonseed crop since 1937, the largest sunflower crop since 1984, the largest peanut crop ever, and a flaxseed crop 17 percent larger than the previous year.

Overall U.S. oilseed production is 63.7 million metric tons, 5 percent above 1990. Estimated world oilseed production for 1991/92 is a record 222.5 million metric tons. This means the world will have adequate supplies of oilseeds in 1991/92 to support higher consumption of protein meals and vegetable oils. But it also means strong competition in oilseed markets—for the U.S. in global markets, and among the various oilseeds themselves.

In the last decade, growth in foreign oilseed production significantly outpaced U.S. production growth, making it more difficult for U.S. oilseeds and products to find foreign markets. U.S. share of world trade in soybeans and soybean meal has trended downward, and the U.S. oilseed sector has become more dependent on domestic users. However, this marketing year offers some unique opportunities for U.S. soybean and soybean meal exports.

The larger supply of U.S. soybeans—almost 2.3 billion bushels in 1991—means more for export activity than for domestic markets. Here's why: The percentage increase in supplies of competing oilseeds, especially cottonseed and sunflowerseed, has been larger. Soybean production is up 1.9 percent, and soybean supply up 6 percent. But cottonseed production is up 16.4 percent, supply up 19.9 percent, and sunflowerseed production and supply are up 45 percent.

The increases in other oilseeds are equivalent to more soybeans, because they

yield oils that are good substitutes for soybean oil, and protein meals that compete with soybean meal. Since soybeans and soybean meal dominate world trade in oilseeds and protein meals, domestic markets must absorb much of the gain in competing domestic oilseeds.

Most of the growth in demand for oilseeds—mainly soybeans—is coming from exports. A short-run demand arose in Brazil—normally a major exporter—because of reduced plantings and below-average yields. In 1991 Brazil ran out of domestically produced soybeans and started importing beans to meet domestic needs. This allowed the U.S. to export more soybeans and meal. However, the benefits are temporary, because Brazil's soybean crop is forecast to recover to 17.5 million tons in 1992.

Livestock Sector Supports Soybean Meal

On the domestic side, a record-large crush of 1.2 billion bushels in 1991/92 is forecast, based on improved prospects for domestic meal disappearance and soybean meal exports. Meal production will reach 29.3 million tons.

Forecast domestic meal disappearance of 23.3 million tons would be a record—not surprising given the generally strong trend in domestic disappearance of meal. Factors underlying the trend include expansion in the hog sector brought about by nearly 2 years of profitability. Another big outlet for soybean meal is the broiler industry. This sector has shown strong growth for a number of years, and growth is expected to continue, although the growth rate may be slowing from what was typical in the mid- to late 1980's.

The outlook for livestock profitability appears more positive now that the size of the 1991 corn and other feed grain crops is known. Supplies appear sufficient to keep coarse grain prices at levels that encourage maintaining or expanding livestock numbers. Although broiler production has shown little sensitivity to meal and grain prices, the livestock sector has tended to contract when grain and meal prices rise.

U.S. meal disappearance has shown relatively little variability over the last decade. Most of the downturns from trend growth are associated with weather-generated corn and soybean price shocks.

The two main markets for meal—hog and poultry operations—are now more concentrated and thus more resistant to fluctuations in feed and meal prices. The fewer but larger hog operations are believed to be more steady producers than smaller operations that enter and exit as costs and returns change. The poultry industry has also become more concentrated and integrated, and consumer interest in chicken and other poultry has increased.

However, soybean meal faces competition from substantially larger supplies of cottonseed meal, sunflower meal, and minor protein meals. Crushing in these markets is driven largely by demand for oil.

On the export side, a 15-percent increase in soybean meal shipments to 6 million tons is projected for 1991/92, a gain in market share to 21 percent. Again, some of the gains derive from Brazil's short crop. Reduced soybean supplies in China are also opening opportunities to sell more U.S. product to Pacific Rim markets. However, this export forecast is far from the levels achieved in 1977/78 through 1987/88.

Soybean Oil Stocks To Grow

A soybean crush of 1.2 billion bushels would generate the meal to meet forecasts for domestic use and exports in 1991/92. But demand for the oil that will result from the large crush is not adequate. Consequently, stocks of soybean oil are expected to grow to a record 2.3 billion pounds.

Although soybean oil prices are forecast lower, this is not expected to encourage much additional domestic use, but it could result in more soybean oil exports. Domestic soybean oil use in 1991/92 is forecast up only 1 percent, but exports up 41 percent from the extraordinarily low 1990/91 levels.

Field Crops Outlook

Demand prospects for other vegetable oils are brighter. Other oils are projected to show larger percentage growth in domestic use as well as strong export growth. Larger supplies of competing vegetable oils are depressing prices across the sector. Cottonseed oil, canola, and sunflower oil are expanding their markets, apparently at the expense of soybean oil.

Looking Ahead To 1992

For 1992/93 and beyond, forces that will shape oilseed markets include short- and long-term factors. In the short term, the size of the South American soybean harvest and acreage provisions of the 1990 farm act for 1992 crops will be important. Over the longer term, the policies of the U.S. and other governments could influence U.S. oilseed production and demand.

Current USDA forecasts for the 1992 South American soybean crop call for a harvest of 29.85 million tons. But whatever the actual production, it will affect U.S. farmers' 1992 price expectations and plantings. Last year demonstrated that soybean acreage is more "mobile" under the new flexibility rules of the farm act. The potential exists for substantial switching on normal flex acres between oilseeds and other program crops, depending on market prices.

Larger factors in 1992/93 are likely to be weather and government policy. Although the EC has proposed changes in the oilseed regime for 1991, the adjustments are not likely to reduce EC oilseed output significantly enough to have much effect on U.S. oilseeds. Assistance to the Soviet Union and emerging East European markets will continue to influence demand prospects for oilseeds and products.

Longer term forces that will shape U.S. soybean prospects include GATT agreements that are still being negotiated, as well as future EC policy and emerging trading blocs and bilateral trade agreements. Other factors include technological developments such as the manufacture of amino acids, like lysine, which

could displace protein meals in feed rations. Expansion of the market for fat substitutes could erode the demand for vegetable oil. Environmental and resource policies could affect not only where a crop is grown; but how it is grown and transported.

The new flexibility in farm programs likely shifted soybean acreage toward more productive states in 1991. As a result, oilseed production is better able to respond to market opportunities than in the 1980's. The demand outlook for the near term is for improved export prospects for soybeans and products. Domestic meal use will remain strong, but the domestic vegetable oil market faces a surplus situation. *[Jim Schaub (202) 720-4587]* **AO**

Cotton's Comeback— Can It Last?

World cotton supply and demand developments during the late 1980's were highlighted by significant gains in both production and consumption and a leveling off of world trade. Growth in cotton consumption outstripped production in 4 of the past 5 years, resulting in declining stock levels. As a result, relatively high prices encouraged cotton production in 1991/92.

World production this season is forecast at a record 90.5 million bales. Despite near-record consumption of 86.5 million bales, larger production is expected to allow stocks to increase further this season. The fundamentals of the 1992/93 outlook for cotton point to adequate stock levels and the need to balance production and consumption.

If currently low cotton prices continue until planting time next spring, foreign output in 1992/93 could slip a little below this season's 72.5 million bales. Among the four largest foreign cotton

producing countries, the following scenarios could develop for 1992/93. In China, cotton production is likely to approximate this season's projected crop of 22 million bales given cotton's importance to the overall economy. A crop of this magnitude could be supported with acreage close to this season's level without adversely affecting food production.

In the Soviet Union, production is likely to be somewhat larger than this season's crop of 11 million bales. Minor area decreases in acreage could occur in order to shift more area into food production. However, there will be strong incentives to maintain a reasonable cotton area since no agricultural crop can match the economic return cotton provides.

India appears bent on maintaining its relatively newfound position as a major cotton producer and exporter. Large area decreases are unlikely, and additional yield increases are possible given India's low yields relative to other major cotton producing countries.

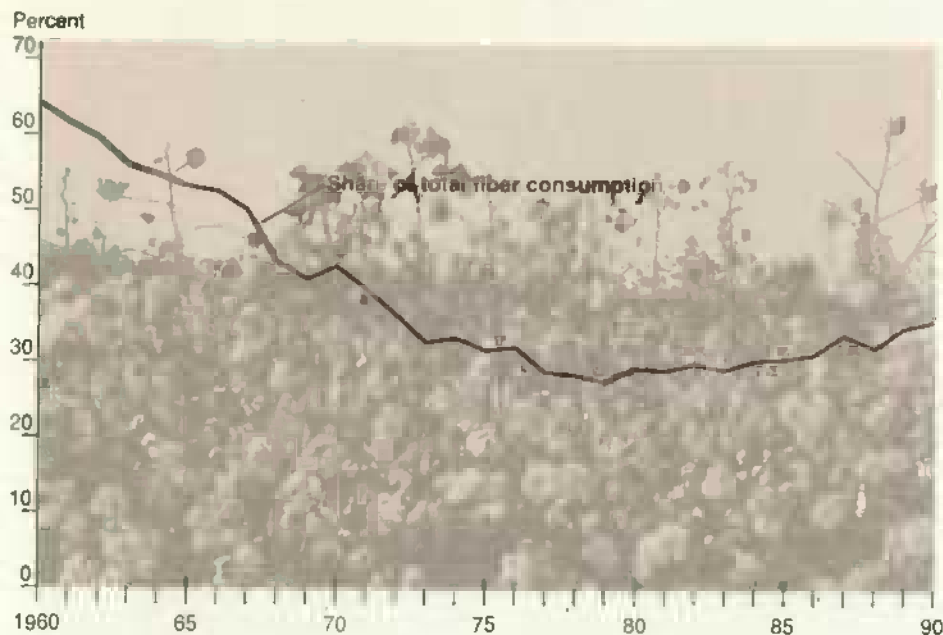
Pakistan will likely continue to expand its position as an exporter of textiles and textile products, in addition to meeting rising domestic demand for cotton. Pakistan's production could about equal this year's record crop of 8 million bales. This could occur mainly as a result of yield increases, as cotton acreage declines with competition from two important food crops, sugarcane and rice.

U.S. Cotton Output Could Decline in 1992

The U.S. cotton outlook points to smaller acreage and production, based mainly on the 1992 upland cotton acreage reduction program (ARP). The 1990 farm act requires the upland cotton ARP be set at a level that will result in a ratio of projected stocks to disappearance of 30 percent. Based on USDA's October supply and use estimate, the Secretary of Agriculture announced a preliminary 10-percent ARP on October 31.

The final ARP, which must be announced by January 1, can differ from the preliminary announcement if supply and demand conditions warrant.

U.S. Cotton Consumption Began To Recover in the 1980's



Other details of the 1992 program include a target price of 72.9 cents per pound for upland cotton, with a loan level of 52.35 cents for base quality upland cotton at a U.S. average producing location. No paid land diversion program will be implemented in the 1992 crop year. The marketing loan and three-step competitiveness provisions implemented for the 1991 marketing year will also be in effect next season.

Assuming a final ARP announcement for upland cotton near 10 percent, enrollment in the 1992/93 upland cotton program could slightly exceed this year's 84-percent participation rate. If weaker cotton prices persist through spring, larger enrollment with more acreage idled under the 10-percent ARP (5 percent was required in 1991/92), and less acreage planted outside the program, would result in lower upland acreage next season.

Total cotton plantings could range between 12.5 and 14.5 million acres with extra-long staple acreage accounting for about 250,000 acres. Acreage in the Southeast is expected to be near this year's level, while acreage in the West could increase if the water situation improves this winter. However, lower acreage is expected in the Delta and South-

west. This season almost 1 million acres in the Southwest and 600,000 acres in the Delta were planted outside the program. Reduced plantings would be expected in these regions.

Given yield variability, the total 1992 crop could range between 15.5 and 18.5 million bales, compared with 18 million bales in 1991. If trend yields and normal abandonment are realized, the upland crop could total 16-17 million bales and extra-long staple production could range between 450,000 and 500,000 bales.

Continued Gains in Consumption Likely

Foreign consumption in 1992 is likely to exceed this season's 77.4 million bales, largely due to a continuing trend of major exporting countries channeling more cotton into their respective textile industries. However, cotton's stronghold will depend upon its competitive position vis-a-vis manmade fibers, the world economic situation, and events in China and the Soviet Union.

In China, cotton imports will be directly influenced by production levels. On the

other hand, consumption levels in the Soviet Union will depend largely upon whether the individual republics can agree on economic and political changes necessary to implement a free-market economy.

Domestic demand prospects for U.S. cotton should remain strong again next season. Mill use may exceed recent historically high rates, based on improved cotton supplies, competitive cotton prices, and continued consumer preference for cotton textiles and apparel. Total cotton mill consumption in marketing year 1992/93 could range between 9 and 9.5 million bales, depending to a large extent on improvements in the general economy.

Foreign trade prospects for 1992/93 are forecast to be in line with this past year's level of 16 million bales, given projections of relatively stagnant production and higher levels of consumption. Total foreign cotton exports depend heavily on consumption needs in Asia, particularly China, Indonesia, and Thailand, but also in Europe. Moreover, attention will continue to focus on export prospects of the Soviet Union.

U.S. exports in marketing year 1992/93 may about match the current season's projected level of 7.2 million bales. With only limited growth in world cotton trade expected, U.S. exports could range between 6.5 and 8.5 million bales, representing a normal share of world trade of near 30 percent.

Based on estimated mill use and exports, total U.S. disappearance in 1992/93 would be between 15.5 and 18 million bales, slightly below anticipated production levels. Stock levels could increase slightly if these estimates are realized, bringing the stocks-to-use ratio near 30 percent.

Some stock rebuilding is also anticipated for foreign cotton producing countries in 1992/93. But larger-than-expected consumption next season would keep the stocks-to-use ratio near the 35.8-percent forecast for the 1991/92 marketing year.

Field Crops Outlook

Keeping U.S. Cotton Competitive


Cotton exports from the U.S. should be in a very competitive position given the market-oriented program of the 1990 farm legislation. Additionally, the cotton loan program and ARP will ensure that adequate supplies are on hand to meet expanding domestic and export demand.

With world consumption projected to grow during the short term, the U.S. should be able to supply some of the increase in world demand. Moreover, a successful conclusion to the current Uruguay round of GATT negotiations would provide U.S. cotton exporters with expanded market opportunities because of the anticipated growth in the world economy. Additionally, reforms would liberalize textile and apparel trade, enabling the U.S. to meet increased world demand for cotton products, and providing the U.S. with more market access for high-quality textile products.

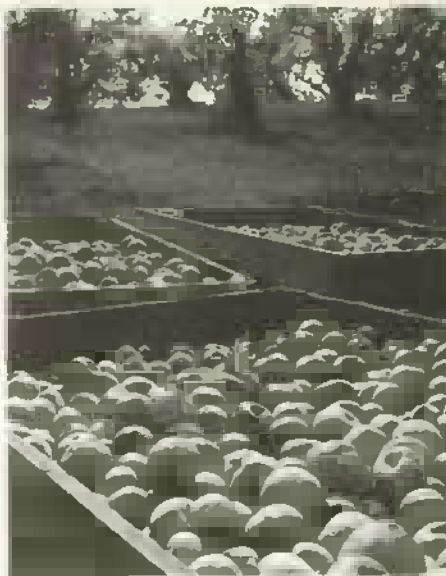
In general, income growth abroad and improved access to foreign markets for U.S. textiles should lead to some increase in U.S. textile exports, since U.S. textile mills are among the most efficient in the world and would have access to competitively priced raw material.

U.S. cotton exports will also benefit from the pioneering work done in the U.S. on High Volume Instrument (HVI) testing, which will revolutionize the way cotton is graded and traded worldwide. Mills that utilize HVI-classed cotton will be better able to produce a uniform quality of yarn and textile products at competitive prices.

Moreover, HVI will also help increase U.S. exports of cotton since the data from this testing can be used in genetic breeding programs to meet U.S. customer demands for fiber strength as well as for desirable physical properties.

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Specialty Crops Outlook



Strong Prices For Fruits, Vegetables

Over the past 7 to 8 years, grower prices for fruit and vegetables, especially fruit, have fared better than for agricultural commodities as a whole. This success is probably due to the rapid growth of horticultural product exports, and to food marketers' emphasis on fresh produce during the past decade.

Grower prices have also been extremely volatile over the past 2 years. This price roller coaster was propelled by a freeze in Florida, and a cold wave that brought freezing temperatures to California, a deep freeze to the Pacific Northwest, and an unusually cool spring in California. The destructive whitefly invasion will continue to power this turbulent ride in the months to come.

The grower price index for all fruit (1977=100), leaped from 235 in May 1991 to 398 in June. Oranges—which account for one-third of the index—were the culprit. The U.S. average on-the-tree price increased from about \$8 to \$21 per box because Florida oranges dropped out of the index, leaving only the higher priced California oranges. Shipments from California were only about 10 per-

cent of normal levels because of the December 1990 freeze damage.

For early 1992, grower prices for most horticultural products are likely to remain high. Although eastern apple crops are up, Washington's supply for the fresh market is no greater than last season's, European supplies are unusually short, and the market for concentrated apple juice is very tight. Fresh market citrus supplies are low, with a shorter Florida crop of oranges and grapefruit, and a smaller lemon crop.

Strong export markets, a smaller almond crop, a very small carryin of pecans, and a short French walnut crop will translate into relatively high prices for tree nut crops. Lower acreage in Florida and western Mexico may keep fresh market vegetable supplies tight and prices relatively high over the winter and early spring months. Prices for many processing vegetable growers may not fare so well. A record processing tomato crop and a large sweet corn harvest are keeping prices low. A record fall potato harvest will keep potato prices on the low side.

Over the past decade, consumer prices for fresh fruit and vegetables have risen at a much faster pace than prices for all food at home. Processed fruit and vegetable prices have mirrored the pace of other foods. Strong export demand and the emphasis placed on the produce departments in supermarkets are factors in these price increases.

With strong and increasing demand for fresh fruit and vegetables, are retailers taking bigger margins on these items? According to USDA's Economic Research Service, the shipping-point-to-wholesale price spread for Washington Red Delicious apples increased less than 5 percent between the early 1980's and late 1980's-early 1990's. But the wholesale-to-retail spread just about doubled during that period.

Consumer prices are likely to remain on the high side in 1992. Among the factors: a relatively strong price outlook for citrus and apples, a smaller U.S. pear crop, a probable small increase in imports of Chilean grapes, new non-U.S.

markets for bananas, the decline in Florida and western Mexico vegetable acreage, and the whitefly.

Buoyed by Demand...

The "Five a Day" campaign reflects fruit and vegetable industry hopes for accelerated growth into the next century. The program will educate consumers on the health benefits of increased produce consumption. If Americans heed the message, they would double their consumption of fruit and vegetables.

The American diet could certainly accommodate more fruit and vegetables. Several countries surpass the U.S. in per capita consumption of many individual commodities, such as apples and fresh citrus. Americans seem to have the edge in consumption of many processed items, such as orange juice, but other wealthy countries are catching up.

Over the past two decades U.S. per capita consumption of fresh produce has increased while processed fruit and vegetable consumption has tended to stagnate. Increased consumption of processed items such as fruit juices, raisins, frozen potatoes, and other frozen vegetables, has been offset by declining consumption in other items such as canned fruit and canned vegetables.

Over half the increase in fresh fruit consumption was captured by bananas and table grapes. Lettuce, tomatoes, and onions were the leaders among vegetables. The increasing demand for fresh fruit and vegetables may help explain why consumer produce prices were able to rise more than the prices for other foodstuffs.

Overall, the recorded per capita consumption of fresh fruit and vegetables increased 30 percent in the last 20 years. Given this record, the challenge of doubling consumption over the next 10 years is daunting.

...And Expanded Trade

In the year ending last September, U.S. exports of horticultural products increased 10 percent to \$5.3 billion. The average rate of increase during the past 5

years was 12 percent. In 1991 the biggest dollar advances were made by fresh vegetables, grapefruit, apples, tomato products, almonds, and wine.

Last fiscal year, imports of horticultural products declined for the first time in more than a decade, totaling \$6.8 billion. A reduction in the quantities and prices of orange juice and fresh tomatoes were main factors in the decline.

Horticultural product exports, and those of other high-value products such as meat, have performed much better during the past several years than exports of other agricultural commodities. Three factors have contributed to the success of horticultural product exports, and will continue to favor them in the next few years.

First, even before the Berlin Wall came down, foreign trade barriers for fruits and vegetables started to tumble, and U.S. exports have benefited. In 1991, trade liberalization helped U.S. exporters to increase sales to Korea from \$59 million to \$79 million and to Venezuela from \$9 million to \$30 million.

Countries around the world are continuing to move away from government controls and toward free markets, and as they do, they are opening their borders to imports of agricultural products, especially fruits and vegetables, in an effort to keep local prices down and to promote competition. This trend will continue even if the Uruguay Round fails.

Second, export promotion, financed in part by USDA, has been a successful tool for increasing horticultural product exports. In the fiscal year ended last September, organizations promoting horticultural products received 48 percent of the \$200 million available under the Market Promotion Program.

Finally, exports of fruit, vegetables, and tree nuts benefited from the devaluation of the dollar in the mid-1980's. Exports in fiscal years 1987 and 1988, which increased 16 and 20 percent, gained the most from the change in the value of the dollar.

What does the future hold? For fruit, vegetable, and tree nut producers, the next few years are likely to bring:

- increased costs, as minor-use pesticides are withdrawn and regulatory constraints, especially those related to environmental quality, increase;
- a more consumer-driven industry, with successful growers and shippers able to respond quickly to changing demands for variety, quality, prices, and consistency of supply;
- continued growth as both domestic and foreign demand increase;
- demand that is less price sensitive, as institutional buyers take increasing shares of the supply, but which could also bring greater price volatility for fresh produce; and
- more competition from foreign suppliers responding to improved access to the U.S. market, and as buyers try to lessen their dependence on a single source of supply.

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U.S. Sugar Consumption On the Rise

Both production and consumption of U.S. sugar appear to be on the rise. Production for fiscal 1991/92 is forecast at 7.3 million short tons, raw value, about 6 percent above 1990/91. The three previous crops were all affected by weather problems, and yet in each year, sugar production was still above 6.5 million tons, higher than any year prior to 1986 except 1975.

Specialty Crops Outlook

Beet sugar production in 1991/92 is forecast at 3.9 million short tons. Harvested acreage of beets is up slightly less than 1 percent to just under 1.4 million acres, and yields are forecast up slightly at 20.3 tons per acre. Last year's beet sugar production was about 3.8 million tons.

Cane sugar production in 1991/92 is forecast at 3.4 million tons, up about 350,000 tons from a year earlier. Louisiana's crop is forecast up almost 300,000 tons from the prior freeze-damaged crop, while Florida's is forecast at nearly 1.8 million tons, close to last season's record-high crop. Hawaii is forecast at 750,000 tons, continuing a decline that began about a decade ago.

The declining trend in U.S. sugar consumption in the decade prior to 1986 has been decisively reversed. And, in the last 2 years, the rate of increase in sugar consumption has exceeded that of high fructose corn syrup (HFCS). From the low of 7.8 million tons in 1985/86, sugar consumption rose by about a million tons in 5 years, an annual average increase of 2.5 percent. Annual per capita sugar consumption has risen in the last 5 years from about 60 to 65 pounds. Whether this trend continues depends upon many factors, including:

- the public image of sugar compared with other basic foods, such as fats and oils, in an increasingly health-conscious population;
- trends in the American diet, such as the popularity of sweet as opposed to salty snacks, and the increasing accessibility of sweet snacks at market outlets;
- development of price-competitive substitute sweeteners with the characteristics of sugar, which might include both caloric and low-calorie sweeteners.

Sugar consumption in fiscal 1990/91 was buoyed by the Gulf war and by spot shortages of HFCS. With no recurrence of such events expected, fiscal 1991/92 sugar consumption is forecast to rise 1.7 percent, slightly below the 5-year-trend

increase of 2.5 percent, to 8.9 million tons. HFCS use is forecast at 6.2 million tons for 1991, about 1.6 percent above the previous year's 6.1 million.

Ending stocks on September 30, 1992 are forecast at 1.4 million tons, about 100,000 tons below last year's ending stocks. At this level, the stocks-to-use ratio would dip to 15.2 percent, slightly below last year's 16 percent.

U.S. raw sugar prices were above 23 cents for six consecutive quarters in 1989 and 1990, but fell to a range of 21.25 to 21.75 cents a pound during the last three quarters. The market has been relatively steady this year, with few events causing big price moves. Barring any major shocks, the recent price pattern should continue into next year.

Former Socialist Countries Add Uncertainty

Events in former centrally planned economies, as well as a fairly large decline in EC sugar production, are some of the major factors that will influence the world sugar market in 1991/92. Overall, world production is expected to fall from the previous year by less than half a percent, from 113 to 112.6 million tons, raw value. A drop in EC production from 17 million tons in 1990 to about 15.5 million tons in 1991 is due to reductions in area and yield in France, and weather problems in other countries.

Among other large producers, increases in production are expected in India, Brazil, the U.S., China, and Thailand. Declines are expected in the USSR, Cuba, Australia, and Mexico.

World consumption is forecast up about 2.5 million tons, an increase of 2.2 percent over the previous year. Among the major consuming countries, only the Soviet Union's is forecast to decline significantly—300,000 tons, from 13.6 to 13.3 million.

This year's big story involves the Soviet Union and Central and East European economies (CEE's), as well as Cuba.

Events in these countries will have a substantial impact on the world sugar market, and present the greatest uncertainties for forecasting production and use. Will there be additional significant deterioration in the economy of the Soviet Union that would further reduce sugar consumption or production? How much will Middle East demand pick up in the aftermath of the Gulf war?

Cuba faces shortages of petroleum, fertilizers, and spare parts, as well as increasing sensitivity to world prices. Cuba also faces the challenge of seeking out new markets as its trade shifts to a hard-currency, market-oriented basis.

Sorting out the implications of the radical changes taking place in these economies for the world sugar market is difficult, particularly until the actual direction of economic policy in each country is established, and until some stability emerges from the current chaotic pace of change. Poland, Czechoslovakia, and Hungary, for example, have declared intentions to move toward private control of resources, but have also begun implementing policies that continue a significant degree of government control of sugar prices.

In spite of moves toward free markets in the CEE's and the Soviet Union, several factors may favor a continuation of government market price intervention in sugar:

- A history and tradition of sugar price intervention exists worldwide; sugar is often a key commodity politically and countries are inclined to ensure self-sufficiency in sugar.
- Lobbies for price intervention will be far stronger than those opposed.
- Agriculture is often considered unique, and not to be left to the vagaries of the market; perceptions of food security can unleash very powerful political forces.
- Many of the CEE's will want to join the EC and may perceive that

A Few Key Producers and Consumers Dominate the World Sugar Market



3-year average (1988-90).

implementing an "EC-style" sugar policy would make eventual union easier.

- Unemployment is a key issue, especially in the period immediately following a "big bang" transformation towards a market economy. Price intervention could mean the difference between success and failure for many sugar factories and farms in the next few years. This illustrates the short-run "Machiavellian" imperative, which can result in high long-run costs.

Other forces would tend to favor a lower degree of market price intervention, including the following:

- Announcements from some governments have in principal favored allowing markets to set prices; call this the "philosophical" imperative.
- With other industries and sectors facing fierce competition, especially from overseas, sugar producers may not succeed in justifying unique treatment.

- Budget constraints will be severe, reducing government price support options (although using border measures and forcing consumers to pay for producer support through higher prices would still be an option for importers).

If the former centrally planned economies opt for sugar regimes that involve a high degree of price intervention, this would move them into the same corner as most other countries with regard to sugar policy. This scenario implies relatively high, stable sugar prices, and attendant low risks for capital investment. If risks in other sectors remain high, perhaps due to less border protection, the relative profitability of sugar would rise.

What about sugar consumption? If Western-style price intervention becomes the norm, the relative price of sugar will tend to rise, as it was commonly held down by price controls. Since per capita sugar consumption in these countries is already well above the world average, it is likely that sugar consumption growth will slow or perhaps even stagnate. In time, low-calorie sweeteners, little used at present, may also become more popular.

In the last 2 years, the former centrally planned economies have moved toward political freedom and economic openness at a breathtaking pace. By and large, the changes have pointed toward the political systems of the Western democracies. But with the Western model for sugar policies, production efficiency and incentives will rise and consumption will be depressed.

Most important, the world sugar price will be no closer to being driven primarily by market signals than it was before restructuring. This combination of rising production and stagnating consumption in a significant part of the world would, other factors being equal, tend to put downward pressure on the world sugar price.

Other factors may not, of course, remain the same. For example, multilateral trade negotiations are continuing under the Uruguay Round. Reductions in sugar

Specialty Crops Outlook

price supports, currently being considered in the trade negotiations, would expose consumers and producers around the world to supply and demand movements. Reductions in price support by a significant share of sugar consuming and producing countries would offset the downward pressure on the world price mentioned above. The world sugar price would also become less volatile.
[Ron Lord (202) 219-0888] **AO**

January Releases from USDA's Agricultural Statistics Board

The following reports are issued at 3 p.m. Eastern time on the dates shown.

January

- 3 Hogs & Pigs
- 6 Dairy Products
- 7 Celery (1 p.m. report)
- Egg Products
- Poultry Slaughter
- 8 Vegetables
- Vegetables--Preliminary
- 10 Cotton Ginnings
- Crop Production
- Farm Labor
- Winter Wheat & Rye Seedings
- 13 Crop Production--Annual
- Grain Stocks
- Rice Stocks
- 15 Potato Stocks
- 16 Milk Production
- Turkey Hatchery
- 17 Noncitrus Fruits & Nuts--Preliminary
- Turkeys
- 22 Cold Storage
- 23 Catfish
- Crop Value
- 24 Cotton Ginnings
- Livestock Slaughter
- 29 Layers & Egg Production--Annual
- 30 Capacity of Refrigerated Warehouses
- Peanuts Stocks & Processing
- 31 Agricultural Prices
- Cattle on Feed
- Eggs, Chickens, & Turkeys

Aquaculture Faces Health, Safety Issues

The U.S. aquaculture industry is expected to continue growing throughout the 1990's, but at a slower pace than in the 1980's. Aquaculture has increased significantly over the last decade, but domestic wild-catch is still the largest source of supply. With landings of many major species now near maximum sustainable yields, substantial additional seafood landings are unlikely. Increased demand will have to be met by rising domestic aquaculture production or greater imports.

U.S. per capita seafood consumption peaked in 1987 at 16.2 pounds, and in 1990 was 15.5 pounds, the same as in 1986. Yet even if per capita consumption remains flat, population growth would add 40 million pounds to seafood demand each year.

While the aquaculture industry is expected to grow, expansion will be neither uniform nor continuous across species. As the industry grows, a number of issues are likely to have major impacts, including health concerns such as food labeling, food safety, and diet needs, and environmental concerns, such as water quality and waste management.

Key environmental issues facing aquaculture deal with water quality and waste management. Water availability in many areas could limit aquaculture expansion as competition for water resources intensifies. Growers will need to maximize production from given water resources.

In response to possible water constraints, research is continuing on water recirculating systems which are designed to minimize the water needs of an operation. Except for some high-value species, recirculation systems have not yet proven economical. When they do, aquaculture production would become possible in almost any area of the country.

The problem of waste product disposal will grow as the industry expands. Waste management is actually two different problems. First, producers must manage the waste from fish manure and uneaten feed. Increasingly restrictive regulations will make disposal a greater problem in coming years. Waste reduction can be accomplished using fish that are more efficient feed converters, or using feeding methods that result in less wasted feed.

Second, processors must manage the waste generated when whole fish are trimmed to fillets or processed in other ways. Possible solutions are to develop uses for waste products as inputs in the feeds of other animals, or composting for use as fertilizer.

Food safety concerns affecting the seafood industry are linked with environmental concerns that include pollution of ocean waters and product handling. Some states, for example, have warned consumers about the dangers of eating raw molluscan shellfish. Such safety concerns could actually have a favorable impact on aquaculture products, if they are perceived as being safer than wild-catch products.

Likewise, comprehensive food labeling on nutritional content may boost seafood consumption in general and aquaculture products in particular, because most seafood has less fat and cholesterol than meat and poultry products and is relatively low in calories. Industry efforts to promote convenient cooking methods that minimize calories will continue to advance consumption.

In addition, the presence of omega-3 fatty acids in many types of seafood have been linked with reduced risk of heart disease. Researchers are working on special diets that could boost omega-3 fatty acids levels in farm-raised fish.

Foreign Markets: Trade Potential or Conflict?

Currently most U.S. aquaculture products are marketed domestically. As the industry expands, it will look to foreign markets for new outlets, and may also

try to capture a larger share of the roughly \$5-billion imported seafood market. One possibility for expanded foreign markets is Europe, with its large population, relatively high standard of living, and high seafood consumption level. Also, wild-catch landings in Europe have been flat over the last decade.

In the domestic market, U.S. aquaculture producers compete not only with other domestic growers, but with foreign producers. Many countries strongly support fish-farming research and development as a way to increase export earnings. Domestic growers are likely to face increasing competition from foreign competitors, especially those that have adopted new technologies and have intensified input and capital use.

As production efficiencies increase, output rises, undermining prices. This increases pressure to continue improving production methods and further reduce costs. This process, evident in the salmon and shrimp industries, will probably be duplicated with other high-value products.

The growth of foreign aquaculture imports into the U.S. could spark trade conflicts in areas of inspection, chemical use, and government subsidies. The U.S. aquaculture industry has asked that standards applied to it also be applied to imports, which could present problems for chemicals or therapeutic compounds used in imported fish. Presently, few chemicals have been approved for U.S. aquaculture use.

Looking to Technology For Solutions

The list of areas in which growers are changing production practices to incorporate new developments is extensive. For example, a number of countries are developing deep-water ocean farming systems. Effective deep-water farming techniques would greatly increase the available space for marine aquaculture. Another example is the use of production sites with low-cost heat sources, such as power-generating facilities or geothermal sources.

Aquaculture producers are also striving to improve the productivity of fish or shellfish through the use of hormones to promote artificial spawning in species, to induce spawning more than once a year, and to achieve sex reversals. Sex reversal techniques are used to convert all members of a population into the faster growing sex.

Gains in nutrition are also a priority in aquaculture. Developments include feeds specifically tailored to new species, new feeding strategies that promote better growth or reduce waste, and feeds that use lower cost ingredients or by-products from other industries.

As production levels are raised, crowding leads to stress in fish populations, increasing susceptibility to disease. Currently, few therapeutic drugs have been approved for use in aquaculture operations. While research is examining the use of new drugs to combat diseases, the market may not be large enough to justify product testing costs. Lack of therapeutic drugs could constrain domestic aquaculture expansion as growers seek to maximize production.

Aquaculture is just beginning to tap the potential gains available through selective breeding. Selective breeding programs are needed to obtain faster growth rates, tolerance to crowding, and disease resistance. Selective breeding has been a key part of the increased efficiency of livestock industries and should be a major means of increasing aquaculture production efficiency.

Research is also underway in other areas of aquaculture genetic research. The transfer of genes from one species to another is one promising area of development. Researchers are investigating the possibility of transferring the genes controlling growth hormone production from one species to another to develop faster growing fish. However, it may be some time before developments in this field can be applied on a commercial basis.

[David Harvey (202) 219-0888] AO

Floriculture—A Growth Industry

Greenhouse and nursery agriculture continues to outpace all other major commodity sectors in sales growth. In 1991, grower cash receipts are expected to total \$8.7 billion, 7 percent more than the year before. In 1990, greenhouse agriculture ("floriculture") and nursery operations ("environmental horticulture") together ranked seventh in cash receipts among commodity groups, and in 21 states ranked in the top five commodities in cash receipts.

Steady and continued market expansion can be expected in the next year or two for floriculture and environmental horticulture crops, but growth and overall performance of the industry will depend heavily on the general economy and consumer spending.

The 1992 outlook is for receipts to grow another 9 percent to \$9.5 billion. Producer sales of most greenhouse crops will likely expand significantly in 1992, while expansion in nursery crop sales will be moderate.

Consumer Expenditures Expected To Improve

With renewed consumer confidence, retail expenditures for greenhouse and nursery products will surge ahead of the last 2 years. Retail expenditures were an estimated \$38 billion in 1990, projected to top \$40 billion in 1991, and could reach nearly \$44 billion in 1992.

The greenhouse and nursery industry has two major segments: floriculture products and environmental horticulture products. Environmental horticulture products (primarily nursery crops, turfgrass, and bulbs) account for about 58 percent of consumer expenditures for all floriculture and environmental horticulture products. Floriculture products (comprised of cut flowers, cut cultivated

Specialty Crops Outlook

greens, potted flowering and potted foliage plants, and bedding and garden plants), amount to about 42 percent of expenditures.

Consumer expenditures for environmental horticulture products are expected to increase to about \$25 billion in 1992. A sharper rise in expenditures is anticipated in 1992 for floriculture products, which should exceed \$18 billion. Expenditures for floriculture products are expected to pick up in 1992 as consumer spending gets back on track, but expenditures will lag for specific environmental products such as landscaping trees. Markets are expected to strengthen in 1993, especially for nursery crop sales, as construction activity enhances demand for landscaping plants.

Consumer expenditures for cut flowers and cut greens increased a modest 3 percent in 1990 to \$5.9 billion, rising another 3 percent in 1991 to \$6.1 billion. Expenditures in 1992 could rise to \$6.7 billion.

Competition is increasing with expanding market supplies. Supplies of cut decorative greens have skyrocketed this year as the productive capacities of foreign growers in Latin America recovered from hurricane and other weather-related damage. Imports of the major cut flowers (roses, carnations, and chrysanthemums) have also continued to rise sharply. Other flowers that have jumped in imported volume include gypsophila and statice.

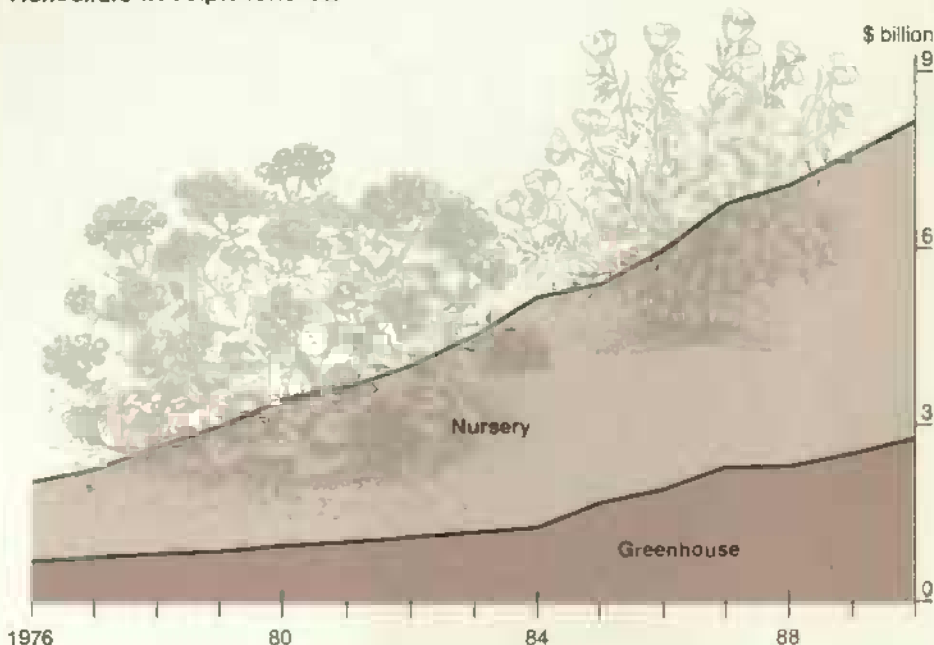
As the world turns . . .

. . . events around the globe affect agricultural trade

Upcoming AO issues explore:

- U. S.-Mexico commodity trade
- Chile's fruit and vegetable sector
- Sugar production in Poland

Floriculture Receipts Take Off



Although prices for most cut flowers were generally higher last year, prices for the major cuts experienced downward pressure from imports, especially during peak demand periods around Valentine's Day, Easter, and Mother's Day.

Higher Japanese demand for orchids and other exotics has resulted in lower available supplies for the U.S. market. More favorable exchange rates for European countries compared with the U.S. and Japan also affected international floral trade, slowing floral exports from Europe to non-European countries.

About 61 percent of the total U.S. floral sales volume is imported. U.S. sales of cut flowers (domestic and imports) are projected to increase 10 percent in 1992. Sales of cut flowers in 1991 should exceed 6 billion stems, up from about 5.6 billion in 1990. Sales of cut roses continued to increase in 1990 topping 1 billion stems for the first time, and 1991 sales are expected to exceed 1.1 billion stems.

Potted Plant Outlays To Jump Next Year

In 1992, expenditures for potted house and patio plants (including hanging baskets) are expected to increase sharply, especially for flowering varieties. Expenditures for flowering potted plants will likely hit \$4.1 billion, while foliage plants may reach \$2.7 billion.

If the economy continues to be sluggish for the next 6-9 months, this rise may not begin in earnest until fall/winter 1992 and spring 1993. Consumers spent about \$3.3 billion for potted flowering plants and about \$2.4 billion for potted foliage plants in 1990. Expenditures in 1991 are expected to rise moderately.

Higher sales of flowering potted plants in 1990 and 1991 were mostly due to production increases rather than price increases. Sales are expected to improve this year with more favorable prices and larger volumes. Consumers are seeking larger and higher quality plants, and favor multicolor varieties and plants with rich, vivid colors.

Sales of potted foliage plants are making moderate gains after several years of downturn. Demand is improving due to consumer environmental concerns, improved products, lower prices for some species, and new varieties.

Bedding & Garden Plant Markets Are Strong

The bedding and garden plant subsector is the largest within the floriculture industry. It is also likely to be one of the strongest demand areas for 1992/93. In 1990, retail sales of bedding and garden plants totaled an estimated \$4.3 billion, rising to \$4.7 billion in 1991. In 1992, sales are projected to top \$5.4 billion.

Increasing demand for bedding/garden plants stems primarily from landscaping contractors, homeowners, institutions, and others wanting to enhance outdoor environments and provide garden diversity. Vegetable bedding plants have shown only moderate growth in demand in recent years, and this trend is expected to continue. But flowering bedding plant demand has been very strong, even in a slow economy.

Sales of flowering annuals and perennials are expected to make strong gains in the next year or two. The spring 1992 season should be brisk for growers, wholesalers, and retail outlets such as garden centers. An exception will be some areas of the Northeast, with sluggish sales, mainly due to slow construction and real estate markets.

1991 Prices Sluggish From Large Supplies

Although 1990 grower prices were higher for most floral, potted, and bedding plant crops, 1991 prices were either weaker or slow to move higher, due to the lackluster economy and larger quantities of imports. Grower prices are generally expected to strengthen in 1992.

However, it remains to be seen whether the economy will be strong enough to bolster demand by spring 1992 when most of the cut flower, bedding/garden, potted plants, and nursery crops are ready for market.

U.S. exports of greenhouse and nursery products are increasing significantly, but imports are rising much faster. The volume of imports has been making larger gains than the values. This reflects a general downward trend in prices of imported products.

For example, imported cut flowers for 1990 increased a modest 3 percent to \$326 million, but the quantity advanced 22 percent to 3.4 billion stems. This trend continued in the first 10 months of 1991, as imported cut flowers are expected to reach a record 3.7 billion stems for the year. Similar trade and price patterns are evident in other greenhouse and nursery products such as cut cultivated greens, bulbs, and live plants.

Industry Looks to Government Cooperation

Greenhouse and nursery agriculture is of major economic importance to farmers, rural communities, and the general public. When "value added" services and employment are added, this industry outranks many traditional agricultural commodities.

Generally, the greenhouse and nursery industry receives no government payments or subsidies but does rely on government protection to maintain phytosanitary restrictions, plant patents and standards, and fairness in trade. The industry also relies on government for assistance in re-registration and development of "minor-use" chemicals to combat major plant disease and insect problems. Environmental issues, water availability, and labor regulations are major concerns to greenhouse and nursery growers, since this industry is one of agriculture's most input intensive.

In addition, the industry looks to joint government-business cooperation to develop new products, expand domestic and export markets, generate new technology to improve production and marketing efficiency, and establish programs to collect statistics and provide sound market intelligence.

To further advance market potential and economic impact, the industry is continuing to develop self-help programs and encouraging a shift in government research and educational emphasis from traditional agriculture toward ornamental and environmental crops. [Doyle Johnson (202) 219-0884] **AO**

February Releases from USDA's Agricultural Statistics Board

The following reports are issued at 3 p.m. Eastern time on the dates shown.

February

- 3 Catfish Production
- 4 Egg Products
- 5 Poultry Slaughter
- Sheep & Goats
- 6 Dairy Products
- 7 Cattle
- Celery (1 p.m. report)
- 11 Cotton Ginnings
- Crop Production
- 13 Potato Stocks
- 14 Milk Production
- Turkey Hatchery
- 18 Farm Labor
- 19 Cold Storage—Annual
- Honey
- 20 Cotton Ginnings
- 21 Cattle on Feed
- Cold Storage
- Livestock Slaughter
- 24 Catfish
- Eggs, Chickens, & Turkeys
- 27 Peanuts Stocks & Processing
- 28 Agricultural Prices

Farm Finance & Resources



Balance Sheet Stable In 1992

Forecasts for 1992 farm financial indicators reveal a moderate rate of growth in the farm economy this year. While most farm income measures will again fall short of records attained in 1990 and dip slightly below 1991 levels, the forecast points to a relatively stable farm economy in 1992, with slight asset growth, stabilized debt levels, and improving equity.

Farm business assets, debt, and equity are each expected to rise 1-2 percent in 1992. While these moderate increases reflect a stabilizing farm economy, they will lag the general price rise of 3 to 4 percent. Measured in 1982 dollars, assets, debt and equity are forecast to decline 2 to 3 percent. However, a slight drop in income and nearly imperceptible loss in real wealth is not expected to create additional financial stress for the sector.

Asset Growth Negligible

In 1992, U.S. farm assets are forecast to rise to a range of \$850-\$860 billion, as the growth rate in asset values improves only slightly over 1991. The value of assets (excluding operator households) rose \$10 billion during 1991, an increase of 1.2 percent. Asset value growth has consistently been in the 1-2-percent range annually since 1988, which may reflect longrun stabilization of the agricultural economy. The real value of farm assets is projected to decline in 1991 and 1992.

Farm real estate assets increased slightly less than \$10 billion during 1991. This 2-percent rise in farmland value suggests that relatively high cash income levels did not dramatically increase investors' expectations of longrun profitability of farming. Farmers showed little desire to bid up land prices in attempts to expand operations. The projected income dip in 1992 would keep the land value appreciation rate even more modest, from 0 to 2 percent.

Nonreal estate asset values are forecast to rise by about \$5 billion in 1992. Live-stock inventories are expected to account

for about 80 percent of the increase, due mainly to rising cattle inventories and higher yearend prices. Hog inventory values are expected to decline, as larger quantities are offset by lower prices.

The values of machinery on farms and of financial assets are also projected to register slight nominal increases in 1992. Inventory values of crops and purchased inputs are anticipated to hold steady, but could move slightly lower. Significant increases in assistance to former Warsaw Pact countries could raise farm commodity prices and draw down inventories. While such action would bolster land prices and enhance current farm income, the impact on ending inventory values is not clear.

Farm Debt Stable

Farm debt is anticipated to increase 1 to 2 percent during 1992. The increase of less than 1 percent in 1991 was significant only for ending a 6-year run of annual debt reductions. Stable land values and healthy cash income of farm borrowers are easing lenders' concerns about loan defaults arising from land value declines. Farmers continue to show restraint in incurring debt to purchase land and replace machinery and equipment.

Farm Equity Forecast To Decline Slightly in 1992



1991 preliminary; 1992 forecast.

Farm Finance & Resources

The traditional institutional farm lenders—the Farm Credit System (FCS) and commercial banks—are restoring loan portfolio quality by recruiting quality borrowers. Commercial bank lending should rise by nearly \$2 billion in 1992, with banks reporting adequate credit for qualified borrowers. While the mix of Farm Credit System debt is expected to change during 1992, total debt outstanding is expected to end the year unchanged from 1991. An increase in nonreal estate lending is projected to offset an anticipated decrease in FCS real estate debt.

Farm equity, the difference between farm asset value and debt, provides a measure of the overall wealth of the sector. Equity in 1992 will continue a slow recovery that followed the slump of the early 1980's. As a result of falling land values, farm equity dropped by nearly \$250 billion (over 30 percent) between 1980 and 1986. Rapid recovery of the sector resulted in annual equity increases of 10 and 6 percent in 1987 and 1988. The growth rate has since slowed, with equity rising at a rate of 1-3 percent annually since 1988.

While this moderate-growth trend is often interpreted as a sign of stability returning to the sector, the recent rates of equity growth have trailed the 3-4-percent general rate of inflation during this same period. The result has been annual declines in the real value of farm equity since 1988, indicating slow erosion of the purchasing power of the farm sector's primary store of wealth.

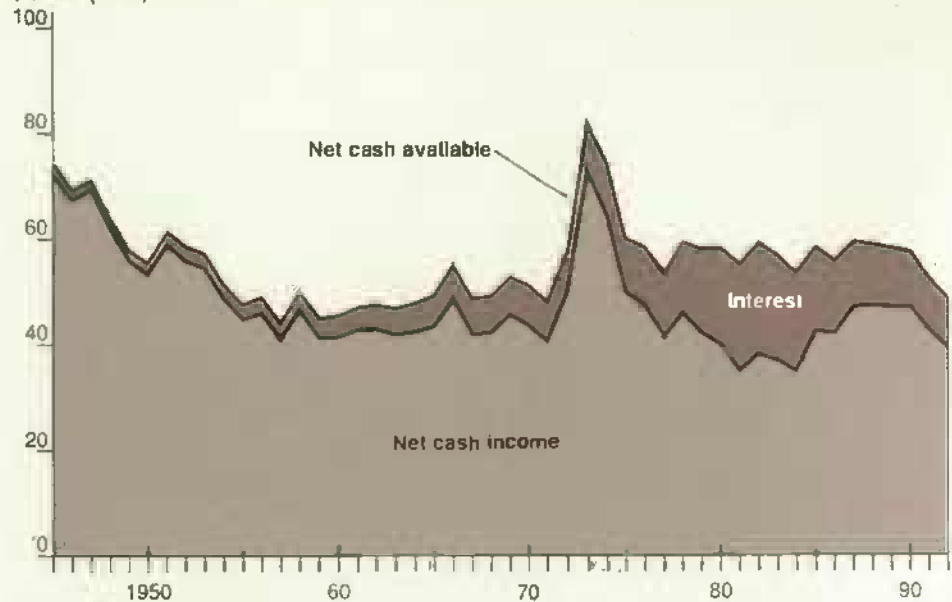
About 60 percent of the nominal equity "loss" during 1980-86 will have been "recovered" by yearend 1992. But the bottom line is that the farm sector balance sheet does not yet show full recovery from the financial crisis of the mid-1980's.

Financial Performance Measures Improve

Despite the gradual erosion of farm equity, the farm sector is showing signs of financial strengthening. Relatively high rates of return to farm equity and assets are expected to continue through

Interest Payments Claim a Smaller Share of Farmers' Cash Since Mid-1980's

\$ billion (1982)



1991 preliminary; 1992 forecast.

1992. The rate of return on equity from current total income is expected to be 3 to 4 percent in 1992. Total rates of return on equity and on assets are projected to continue the relatively favorable levels of recent years.

Other measures of financial performance suggest a stable to modestly improving farm sector during 1992. While 1992 cash income should allow adequate funds for debt servicing, the aggregate farm debt-to-asset ratio continues to improve. Returns to operators, a residual income measure for farm businesses, is expected to fall slightly.

Net available cash income from farm operations is computed by adding interest expenditures to net cash income. This financial indicator measures the net cash income that is being generated by the farm sector, after it meets all noninterest cash production expenditures. It represents the cash income that would be available to the farm sector if it were debt-free.

The portion of this available cash that was paid as interest to farm creditors rose from less than 16 percent in the early 1970's to almost 37 percent by the end of 1981. With the rapid drop in farm debt

levels and interest expenses in the mid-1980's, this ratio fell to less than 20 percent by the end of 1988, and is anticipated to remain in the range of 18-20 percent through 1992.

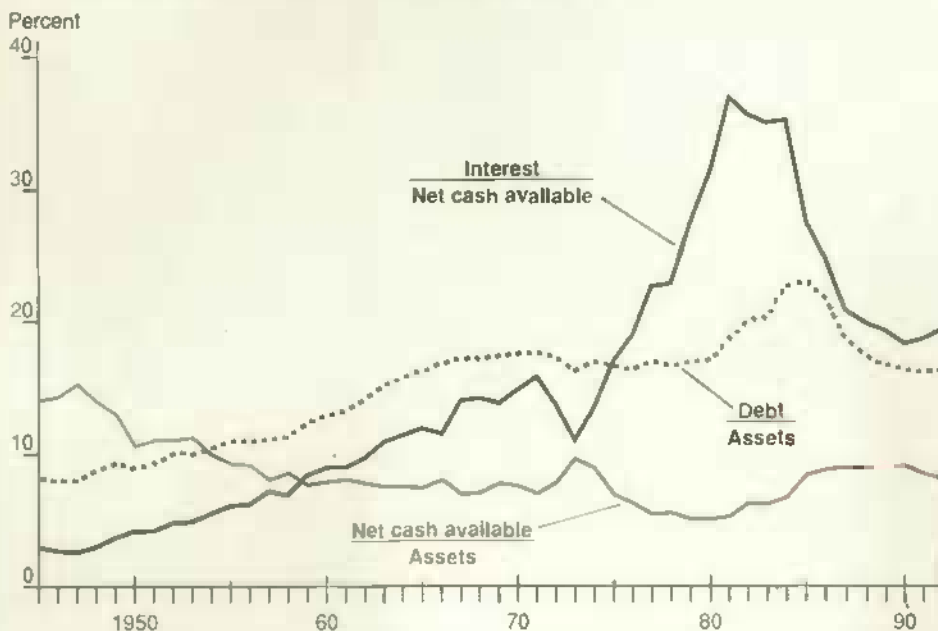
These indicators support the view that the economic stress of the mid-1980's did not result from lower income, but from a financial structure requiring a larger income share to be distributed to creditors. The relatively high levels of net cash income from farm operations generated during the 1980's were depleted by the large proportion paid to creditors in interest payments.

Entering 1992, the reduced claim by interest payments on net cash available suggests that, despite the gradual erosion of real farm equity, farmers are now better able to cope with slightly lower net cash income.

Optimism in the face of the slight income decline is due chiefly to reversals of several factors that contributed significantly to the stress of the 1980's: 1) declining cash income relative to asset values; 2) an increasing debt-to-asset ratio, as farm debt rose even faster than the rapidly increasing asset levels; and 3) the increasing portion of available cash distributed

Farm Finance & Resources

Most Financial Indicators Post a Solid Farm Sector



1991 preliminary; 1992 forecast.

as interest payments to lenders. All of these factors are not only reversed but dramatically improved from mid-1980 levels, and are forecast to be stable through 1992.

No Major Setbacks In 1992

While the health of the farm economy through the early 1990's is not a certainty, farmers and their lenders now appear reluctant to resume debt-financed expansion in response to the relatively high income levels of recent years. Macroeconomic forecasts of a general inflation rate of 3 to 4 percent through the mid-1990's suggest continuing declines in real farm wealth, as farm asset and equity growth rates will be hard pressed to match the inflation rate.

While the rest of the economy sluggishly recovers from recession, most farmers will make little financial progress in 1992. However, the decline in farm income forecast for 1992 is anticipated to be far less severe than in the 1980's, so most farmers will also be able to avoid major setbacks.

Overall, the financial position of farmers entering 1992 appears to continue a gradual erosion from the heights attained in the late 1970's. While the combined effect of moderately increasing asset values and reduced debt loads have greatly decreased farmers' vulnerability to short-term fluctuations in income, the long-term impacts of declining real equity values cannot yet be determined.

[Jim Ryan and Ken Erickson (202) 219-0798] **AO**

Upcoming Reports from USDA's Economic Research Service

The following are January release dates for summaries of the ERS reports listed. Summaries are issued at 3 p.m. Eastern time.

January

- 13 World Agricultural Supply & Demand
- 17 Livestock & Poultry
- 22 Dairy
- 23 Oil Crops

Net Incomes To Dip from 1990 Record

The latter part of the 1980's saw U.S. agriculture improving each year as recovery from the farm financial crisis continued. Cash receipts increased some \$10 billion per year, while government programs became more market oriented and contributed less to gross cash income. Even with expenses rising \$4-\$6 billion per year, net cash income rose an average \$2 billion annually. Crop and livestock receipts reached record levels in 1990, and net cash income (\$61.8 billion) and net farm income (\$50.8 billion) were each at a new high that year.

Net cash and net farm incomes for 1991 and 1992 are forecast to return to 1988-89 levels. Lower livestock receipts, lower government payments (in 1991), and continued expense increases will combine to leave net cash income at \$58 billion in 1991 and \$52 to \$57 billion in 1992. Net farm income is forecast at \$44 billion in 1991 and \$40-\$46 billion in 1992.

Although these levels reverse the direction of income in recent years, they still exceed all those up to 2 or 3 years ago. When general inflation is factored in, real cash income has eased downward for the past 4 years. Still, real cash income remains above the early 1980's and on the same longrun trend since the 1950's.

Receipts Favor Crops Over Livestock

Total cash receipts reached a record \$170 billion in 1990—\$80.4 billion from crops and \$89.6 billion from livestock. For both 1991 and 1992, however, receipts are forecast to fall 1 percent, primarily due to declines in red meat and dairy receipts. Crop receipts are expected to be higher for 1991 and to hold steady in 1992.

Wheat receipts fell in 1990 and 1991 as record 1990 world production led to falling prices. With lower 1991 production and stronger domestic use and exports, prices began rising. For 1992, a lower wheat acreage reduction program (ARP) should raise production and, with steady to slightly rising prices, wheat receipts are forecast up 10-12 percent—still below 1988-90 average levels.

Corn earns the largest receipts among U.S. crops. A 5-percent ARP has been announced for 1992 feed grains, which should lead to higher production, but the lower forecast prices may reduce corn receipts. Given its importance to the agricultural sector, corn production exerts major impacts on historical swings in farm incomes.

Other crop subsectors are holding steady or show slight receipt reductions. Fruits and nuts are the notable exceptions. Last winter's freeze in California severely reduced fresh market supplies of oranges, causing prices to jump 2 1/2 times their normal level this summer. Although California's orange crop has recovered to near normal, strong export demand and a smaller Florida crop will keep orange prices above normal. Shorter grapefruit and lemon crops will maintain prices for other citrus fruits.

Livestock receipts, including red meats and dairy, were record high in 1990. However, in 1991 and 1992, red meat receipts are likely to fall. Cattle and calf receipts are forecast off 1-2 percent in 1992. With hog production projected at a record high, prices are expected to fall from a 1991 average just under \$50 to a 1992 level in the low- to mid-\$40's, leaving hog receipts down 6-8 percent. Dairy product receipts are forecast to improve by some 2 percent in 1992 after a drop of 10 percent in 1991. Poultry receipts will be steady to slightly lower.

Direct government payments reached a high of \$16.7 billion in 1987. For 1991 they are estimated to total slightly more than \$8 billion, continuing the decline of the last few years. However, direct payments in 1992 are forecast at \$9 to \$10 billion, up 10 to 13 percent from 1991, with most of the increase coming from cotton deficiency payments. Food and

It All Adds Up— Common Farm Finance Terms

Current and Constant Dollars—*Current dollars* measures purchasing power in the prevailing year, but when the effects of inflation are omitted, current dollars cannot be meaningfully compared over time.

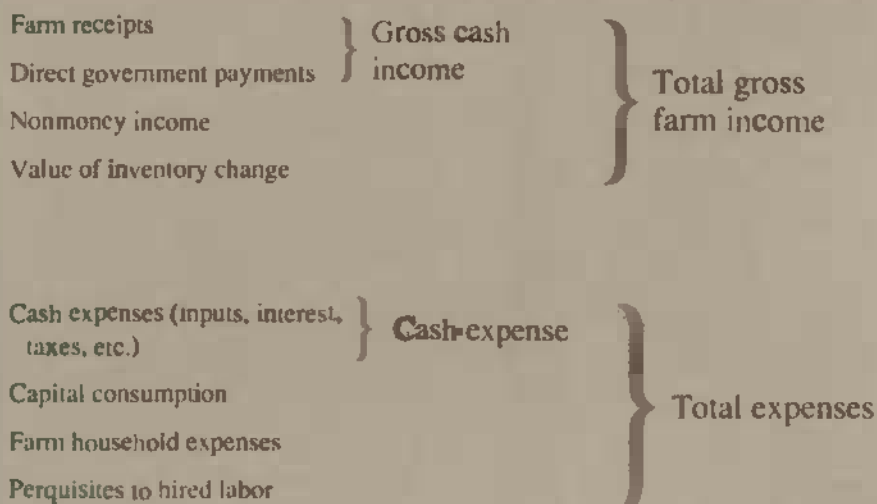
Constant dollars accounts for these inflationary effects. Constant dollars uses a 1982 base and is also referred to as a real, or inflation-adjusted measure.

Net Cash Income = Gross cash income less cash expenses. Net cash income measures the total income received in a year, regardless of the year in which the marketed output was produced. It measures funds available to cover cash operating costs, to finance capital investments and savings, service debts, maintain living standards, and pay taxes.

Net Farm Income = Total gross farm income less total expenses. Net farm income measures the profit or loss associated with a year's production. Additions to inventory are treated as income, and nonmoney items such as depreciation, consumption of farm-grown food, and the net imputed rental value of operator dwellings are included.

Farm Equity—Measures net worth. Farm equity is calculated as farm sector assets minus sector debt outstanding.

Debt/asset ratio—Calculated as total debt outstanding on January 1, divided by farmers' estimate of the current market value of owned assets of the farm business.



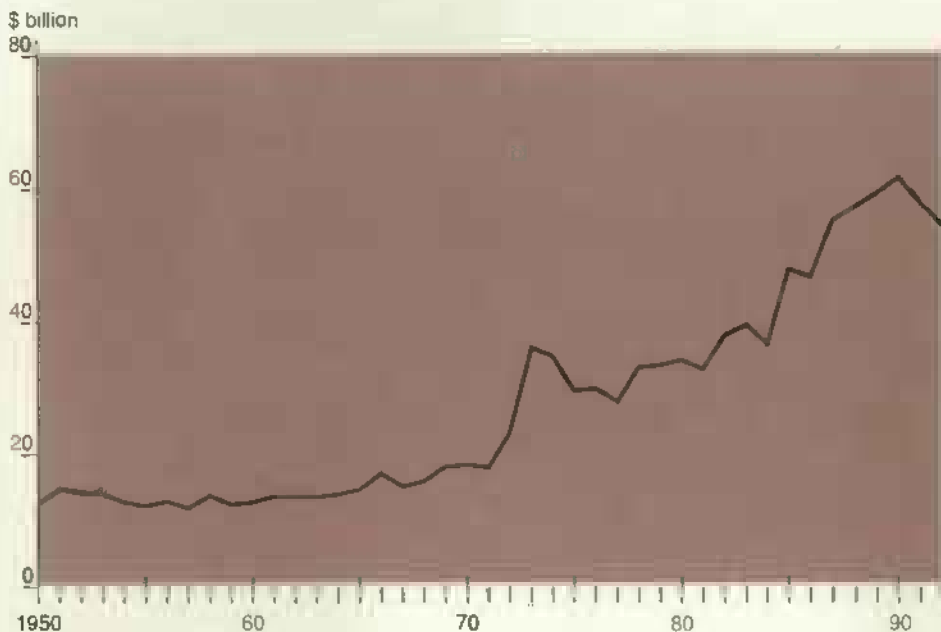
feed grain payments are also forecast up, although by small amounts. Conservation program payments are forecast to rise slightly from 1991's level to just over \$2 billion.

Production Expenses Still Climbing

Production expenses for 1992 are forecast to increase 1-3 percent. Feed accounts for the largest single farm cash expense. Corn and soybean meal prices

Farm Finance & Resources

Net Cash Income Retreats from 1990 Record



1991 preliminary; 1992 forecast.

could fall by less than 1 percent, while prices for other feeds could fall as much as 3 percent.

The number of cattle placed on feed during this past summer was off 16 percent from a year earlier, the lowest level of net placements since 1981. Fewer cattle placed on feed means more heavyweight yearling cattle remaining outside feedlots. When and if they enter the feedlots in 1992, they will be ready for market in less time than usual, reducing feed demand. With the number of cattle on feed up only 1 percent in 1992 and hog inventories constant, feed expenses are forecast up, but by less than 1 percent.

Feeder livestock is the second-largest item in total farm cash expenses. Feeder cattle prices are forecast down 4-6 percent in 1992 and feeder pig prices down 12-14 percent. These price reductions will help lower total 1992 feeder livestock expenses by slightly under \$500 million.

The manufactured inputs—fertilizer, fuels, electricity, and pesticides—each account for some 4-6 percent of farm cash expenses. Forecast increases in 1992 acreage of the major crops are expected to raise demand for these production in-

puts. Prices for each are also forecast to be higher in 1992, leading to increases in expenses ranging from 1-3 percent for fertilizers and pesticides, to 4-6 percent for fuels and electricity. Total 1992 manufactured input expenses are forecast to rise nearly \$1 billion.

Interest costs played a major role in the financial crisis of the early 1980's. Since that time, interest expenses have fallen, particularly for real estate, through debt reduction and fiscal conservatism on the part of producers and their lenders. Interest expenses reached a high of \$21.8 billion in 1982, then fell each year through

1990. For both 1991 and 1992, they are forecast to fall 1-2 percent.

Operating expenses covering such items as repairs, labor, custom work, and transportation are forecast to rise 3-7 percent. Labor expenses are the third-highest cash expense component following feed and livestock, and could rise by nearly \$1 billion, or 7 percent, in 1992, due to higher wage rates and increased demand from the increased crop acreage. Repair costs, half the dollar amount of labor, are forecast up 5 percent.

Cash Grain Income To Rise

While overall net cash incomes are forecast down 4 percent for crop farms and 6 percent for livestock farms, some farm types are expected to experience a slight increase. Cash grain farms (those with over 50 percent of the value of production coming from one or more cash grains) could see 1992 net cash incomes increase about 1 percent on average, led by wheat receipts. Since most cash grain farms are in the Midwest, this region should outperform the other major areas in crop receipts.

However, many cash grain farms also produce livestock, usually hogs. With hog receipts forecast down 6-8 percent, the Midwest would see livestock receipts off some 8 percent, outweighing crop increases and leaving total receipts for the region about 1 percent lower. With cash expenses rising across all farm types and in all regions, Midwest net cash

Farm Expenses Up, Income Down In 1992

Item	1990P	1991P	1992F
		\$ billion	
Cash receipts	170.0	168	163 - 171
Gross cash income	186.0	183	179 - 188
Cash expenses	124.2	126	125 - 132
Net cash income	61.8	58	52 - 57
Gross farm income	195.1	190	189 - 197
Total expenses	144.3	146	146 - 154
Net farm income	50.8	44	40 - 46

P = Preliminary; F = Forecast.

incomes are forecast down just under 6 percent.

Incomes for other major farm types are forecast to decline in 1992, with the exception of dairy farms, where a very slight increase could occur. Net incomes are also expected to decline in other major regions. The decrease will range from 4 to 5 percent in the Northeast, Southeast, and West, but will fall by less than 1 percent in the South Central region, where cotton predominates and wheat and rice are also prominent.

Why Did Incomes Increase in December?

Farm financial forecasts are updated and published quarterly. The forecasting model uses the most current final U.S. estimate as a base for subsequent updates. This annual estimate is moved by commodity price and quantity forecasts, to arrive at future expected receipts and expenses. The October and November issues of AO based 1990 and 1991 forecasts on the 1989 final estimate.

Last month, the 1990 final estimate was released, so the base was changed to 1990. Compared with the earlier 1990 forecasts, the final estimate showed slightly higher receipts for many crops and slightly lower expenses. This raised overall crop receipts \$1 billion, and lowered cash expenses \$1.2 billion. The result was 1990 net cash incomes up more than \$2 billion from earlier forecasts, and net farm incomes up over \$1 billion. At the same time, 1991 forecasts moved to the upper end of the published ranges.

[Bob McElroy (202) 219-0800] AO

**Look for AO again
in March**

**Agricultural Outlook will not
be published in February**

High Acreage Boosts Input Demand

The outlook for farm input consumption and expenditures in 1992 will be shaped by modest price increases in most purchased inputs, an increase in planted acreage, and a slight shift in crop mix. Farmers are expected to spend 1-3 percent more for farm inputs in 1992 than the estimated \$125 billion spent in 1991.

In addition to price increases, factors driving the rise in expenditures include greater corn and wheat acreage, which will more than offset an expected decline in soybean and cotton acreage. The mix and level of crop acres planted have a major influence on input demand.

By contrast, per-acre seeding rates, application rates for fertilizers and pesticides, and tillage practices tend to change slowly from year to year. However, large increases in input prices, as seen during the energy crises of the 1970's, have been followed by lower application rates of energy-intensive inputs such as fertilizer.

The level and mix of crops in 1992 is likely to differ from 1991, due to lower ARP levels for wheat and feed grains and increased familiarity with the flexibility provisions of farm programs. Row-crop acreage is expected to rise next year, with larger corn acreage more than offsetting fewer soybeans. Winter wheat acreage will also increase next year since ARP levels were reduced from 15 to 5 percent. Consequently, planted acreage of the principal crops may exceed 330 million acres in 1992.

Fertilizer, Pesticide Use Is Up

U.S. fertilizer use in 1992 should be over 20 million tons given the expected upturn in planted acreage, exceeding 1991's consumption of about 20 million tons.

Fertilizer prices for 1992 are expected to continue their upward momentum, with the prices-paid index increasing 4-6 percent. Increasing energy prices and greater corn acreage account for the expected fertilizer price strength. Over the last 5 years, fertilizer prices have been quite volatile, with price declines in 1986 and 1987, increases in 1988 and 1989, a dip in 1990, and a hike again in 1991.

Estimates of pesticide use on the major field crops also tend to follow planted acreage, with herbicides accounting for about 80 percent of all active ingredients, insecticides about 15 percent, and fungicides and other products the remainder. Since over 90 percent of all corn, cotton, and soybean acres are treated with pesticides, these crops account for a large share of all pesticide use.

Annual consumption of pesticides on the 10 major field crops is estimated at 450-500 million pounds of active ingredients (a.i.), with variations due to shifts in planted acreage and pest infestations. Pesticide use in 1992 is expected to be near the 480 million pounds estimated for 1991.

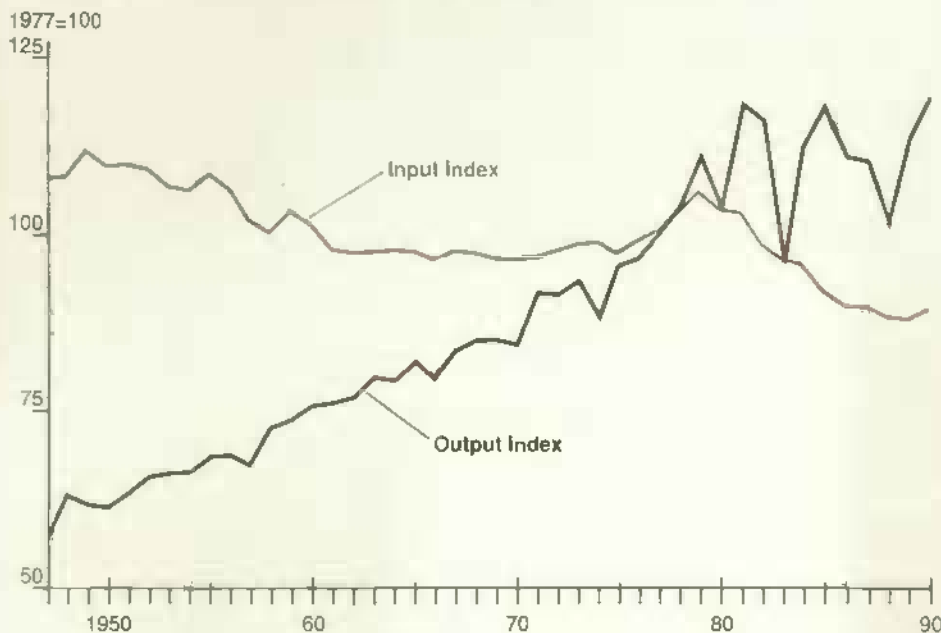
Pesticide prices have risen steadily since 1988, with the largest annual increase (almost 9 percent) occurring between 1990 and 1991, when the input-intensive row-crop acreage rose by about 6 million acres. Prices in 1991 for all major pesticide products were above 1990 levels. Prices are expected to continue upward in 1992, partly reflecting significant costs of R&D, registration, reregistration, and marketing.

Farm Capital Purchases Flat in 1992

Tractors and other farm machinery account for about 60 percent of farmers' capital expenditures. Buildings and land improvements make up another 20-25 percent, and autos and trucks the remaining 15-20 percent.

Farm Finance & Resources

Fewer Inputs Produce More Agricultural Output



Output index measures annual changes in crop and livestock production available for human consumption. Input index measures annual changes in the volume of resources used in production.

Farm income in 1992 is forecast down, expected despite increases in crop cash receipts, planted acreage, and government payments. Last year, concern about drought in some parts of the country, as well as lower dairy prices, increased production expenses, and lower farm income expectations likely combined to discourage capital purchases. Tractor sales for 1991 slowed considerably throughout the year, resulting in forecast unit sales of 5-10 percent less than 1990. Sales of combines were also weak during 1991 except for May and June.

These factors are likely to offset other encouraging indicators: higher farm asset values in 1991 and 1992 and lower interest rates. The net effect is expected to be flat growth in tractor and machinery sales in 1992 relative to 1991.

New Technology Key to Increased Efficiency

Agricultural productivity growth, which has increased steadily over the last 20 years, will continue to be critical to the

economic health of the sector. Productivity increases allow the farm sector to absorb the incessant rise in input and service prices and remain competitive internationally.

During the 1980's, aggregate agricultural output expanded at an average annual rate of 2 percent, in spite of an actual shrinkage in the total resources committed to production. Productivity growth—measured as output per unit of input—has been a robust 3.6 percent annually since 1980.

Input substitution and adoption of new technology are keys to continuing growth in productivity. Biotechnology research in both the private and public sectors promises to transform or replace some conventional inputs. Just as the mechanical, chemical, and computer technologies of the past changed input type, mix, and intensity, genetic manipulation of livestock and crops will have a similar impact in the future. The established seed and chemical industries, as well as the newer biotech firms, are poised to introduce a number of new products to the market over the next decade.

Changes in the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), involving pesticide testing or retesting for possible health risks, will likely add to the costs of marketing pesticides. Pesticide availability and use, especially for specialty crops, may also be affected by concerns about pesticide residues on food, farm worker safety, product liability, product reregistration, and groundwater contamination. Implementation of the Endangered Species Act may also influence pesticide usage.

The search for strategies to deal with ground and surface water contamination from agricultural production continues—at both the state and Federal levels. The focus of these strategies is on nitrates and pesticides. For the most part, proposals emphasize education and technical assistance, but in some geographic areas, regulations may be issued on land use, input application, and cropping sequence.

(Stan Daberkow (202) 219-0456 and John Schaub (202) 219-0469) AO

Upcoming Reports from USDA's Economic Research Service

The following are February release dates for summaries of the ERS reports listed. Summaries are issued at 3 p.m. Eastern time.

February

- 11 World Agricultural Supply & Demand
- 13 Agricultural Resources
- 18 Wheat Yearbook
- 19 Agricultural Income & Finance
- 20 Agricultural Outlook
- 21 Feed Yearbook
- 24 Livestock & Poultry
- 25 Cotton & Wool
- 27 Exports

Rural Development



Thriving Rural Economy In the 1990's?

The world economy is changing as markets become international.

New production technologies are altering what is produced, how it is produced, and where it is produced. And new information technologies are the catalysts. As new opportunities open and old ones disappear, people and places that adapt will thrive, and the others will eventually lose out.

A critical issue for the 1990's is whether rural areas will be able to find niches in the new economy. Thus far, with some exceptions, they have not.

The 1980's were unkind to rural workers, their families, and their communities. Job growth stagnated, unemployment rates remained high, and earnings dwindled. More than 1,240 rural (nonmetropolitan) counties—over half—lost population between 1980 and 1990.

Rural outmigration is not a new story. Outmigration had been characteristic of rural areas from the 1920's until the "rural renaissance" of the 1970's. But the 1980's were not a return to old times. The outmigration of earlier decades,

much of it an exodus from marginal farms, was accompanied by rising rural incomes and a narrowing of the rural-urban income gap.

By contrast, rural per capita incomes failed to rise in the 1980's, despite the continued increase in women's labor force participation. The 1980's was the first decade in the century when the rural-urban income gap widened instead of narrowing.

Rural Growth Runs Out of Steam

One explanation for the rural economic disadvantage in the 1980's is an old one—a loss of jobs in traditional resource industries. Agricultural employment, including forestry, fishing, farming, and agricultural services, fell more than 10 percent during the decade. A mining bust followed the energy boom at the beginning of the decade, with a loss in rural area employment of nearly a third. Traditional resource-based em-

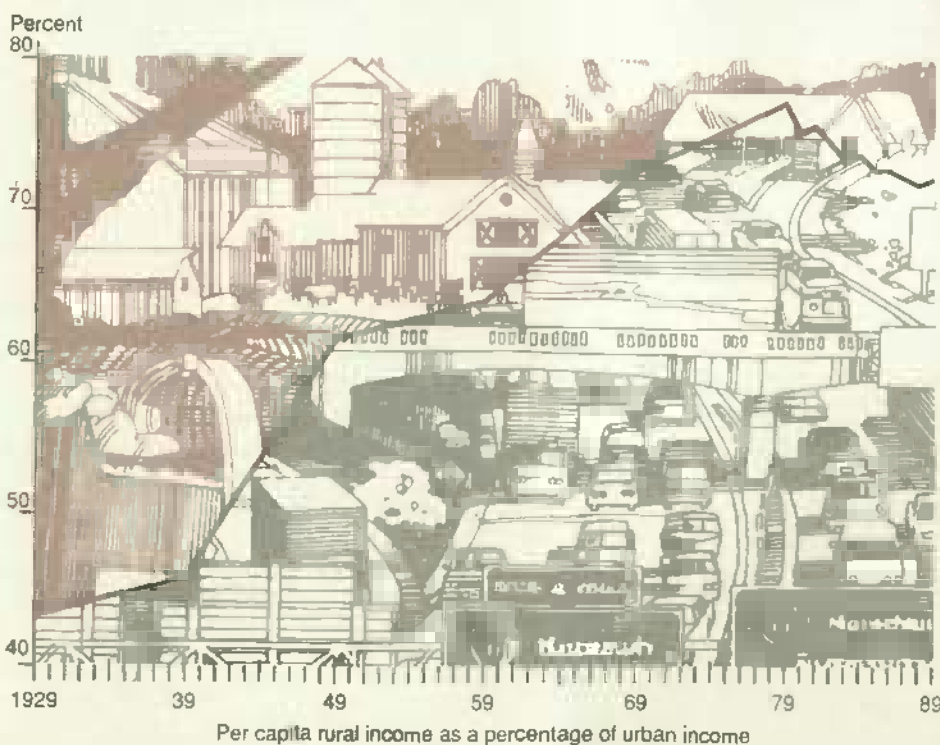
ployment is much lower now than it was in earlier decades.

These declines, although devastating for some areas, were actually relatively small compared with earlier decades and in the context of the rural economy of the 1980's. Moreover, resource industry job loss and outmigration have historically been associated with rising rural incomes.

A second reason for the rural economic problems in the 1980's was that manufacturing, a traditional engine of rural growth, ran out of steam in the 1980's. From 1940 through 1980, manufacturing employment expanded nationally and shifted from major cities into smaller towns. Rural manufacturing employment increased by about 1 million per decade during this period. Although these new jobs were generally not high paying, they often paid better than the alternatives.

These jobs also absorbed some of the exodus from agriculture, provided off-farm job opportunities for the increasing part-time farm population, and enabled some

Rural-Urban Income Gap Grew in the 1980's

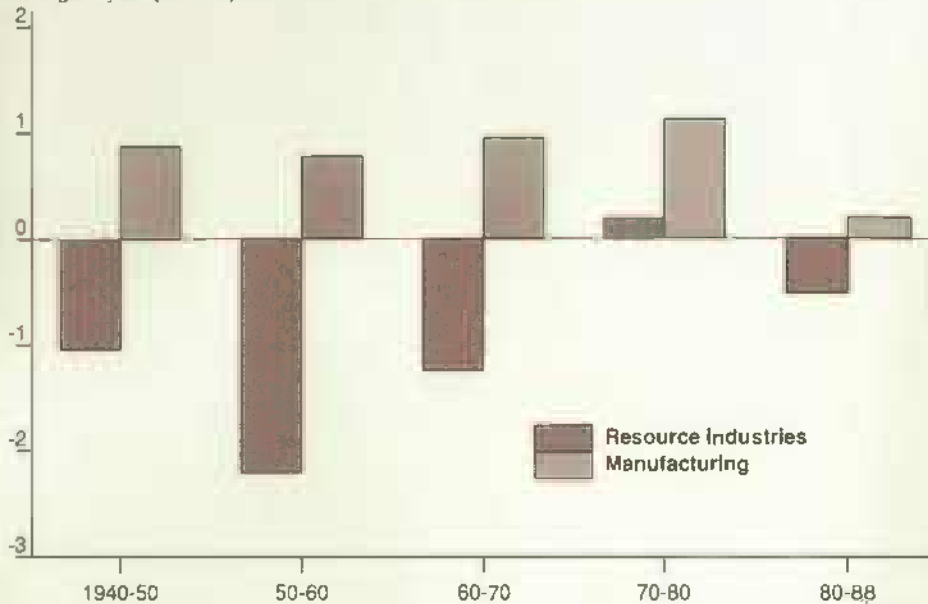


Source: Bureau of the Census (1929-79) and Bureau of Economic Analysis (1980-89).

Rural Development

Growth in Rural Manufacturing Jobs Declined in the 1980's

Change in jobs (millions)



Source: Bureau of the Census and Bureau of Economic Analysis.

people who had moved to the city to return home. By 1980, over twice as many rural residents worked in manufacturing than in agriculture and mining combined. Manufacturing jobs were important contributors to the local economic base, helping to sustain growth in the rural service sector.

From 1980 to 1990, however, manufacturing employment declined nationally, and the number of new rural manufacturing jobs fell to just 200,000. Yet, even the failure of rural manufacturing to generate new jobs does not entirely explain the rural economic problems of the 1980's. Urban areas generally did better than rural economies in the 1980's despite a slight loss in manufacturing. The rural economies depended more heavily on manufacturing employment than the more diversified urban economies.

Left Out of the "New Economy"

The rural problems in the 1980's stemmed not only from a decline in employment opportunities in traditional rural industries—including manufacturing—but also an apparent inability to par-

ticipate in the activities of the "new economy." During the late 1970's and 1980's, increasingly global markets and rapid technological change, catalyzed by rapidly evolving information systems and the new "knowledge occupations," meant relatively fewer new opportunities were being created in traditional production work.

The new opportunities were largely for urban-oriented people with relatively high levels of education. This is evident in urban-rural comparisons of changes in jobs, earnings, and migration.

The urban orientation of the new economy is particularly evident in manufacturing. In percentage terms, the change in total manufacturing employment between 1980 and 1988 was relatively small in both rural and urban areas. However, in urban areas, there was a marked shift in the types of jobs, with tremendous growth in management, research, and professional jobs—over 30 percent—and a substantial decline in production jobs.

In rural areas, on the other hand, there was little shift in types of jobs. Now more than in earlier decades, rural areas

perform a high proportion of the low-skill production activities, while urban areas take on the management, research, and professional tasks.

In 1979, adult males working full time earned about 10 percent more in urban areas than rural, regardless of education levels. This was probably attributable to differences in the cost of living. But with growing opportunities for better educated workers in urban areas, the urban earnings advantage increased to about 30 percent by 1989.

The rural disadvantage also increased for women. Thus, by the end of the decade, younger, better educated men and women remaining in rural areas were often making a substantial financial sacrifice in their choice of residence.

Not surprisingly, the rural-urban earnings gap generated a considerable net out-migration of better educated workers to urban areas. This migration was especially high among young adults. Between 1988 and 1989, for instance, the net loss of young adult college graduates was nearly 4 percent.

On the other hand, there was a small net immigration of less educated young adults to rural areas. This may reflect the fact that housing costs had risen in urban areas during the 1980's, while earnings for people without post-high-school education had not.

Why was the new economy an urban economy in the 1980's? One possible explanation is that, with relatively low education levels compared with urban workers and workers in other developed countries, rural workers were simply unable to compete in the world market and earn what is considered desirable wages.

From 1992 to 2005 . . .

Agricultural occupations—
a look ahead

plus . . .

Recent trends in farm and
farm-related employment

In the March issue of
Agricultural Outlook

But a recent study by USDA's Economic Research Service concluded that education was not the rural bottleneck. Earnings for all better educated workers rose more in urban areas than rural areas, suggesting a greater urban labor shortage relative to demand. Moreover, even rural areas with relatively highly educated workers had no advantage over other rural areas in the 1980's.

An alternative explanation is that the remoteness and sparseness of rural settlements made them largely unsuitable for complex manufacturing operations, industrial research, or other activities requiring highly skilled, highly educated employees and rapid access to information. This explanation is supported by the fact that the geographic concentration of "new economy" activities into and around major cities has occurred in other industrialized nations as well.

Anecdotes abound about stock market traders and others taking their personal

computers, fax machines, and modems to the countryside. But while the rapid development of information technology suggested that information-dependent businesses could move out of urban areas, there is little evidence that face-to-face contact has become less important with the new technology. Indeed, information technology may have hastened the pace of change, making frequent face-to-face contact more important than ever.

Adaptation May Be Key To Rural Prosperity

The residents of two types of rural areas are likely to do relatively well in the coming decade. The first type is adjacent to large, growing metropolitan areas. The second includes those with natural amenities that are attractive for recreation, tourism, retirement, and related activities. For other areas, resource-based industries such as mining or forestry offer some prospects for employment growth.

While agriculture will generally prosper, technological change and consolidation likely means diminishing job opportunities in predominantly rural agricultural areas. Both rural and urban areas have difficulty being competitive in manufacturing relative to other developing industrialized nations that can offer lower wages. Rural areas face an added disadvantage in creating the information and other infrastructure necessary to attract industry.

But there is no reason to assume the 1980's have set the rural future in concrete. The Boston area, for instance, was written off as a disaster in the 1960's and proclaimed a miracle in the 1980's. It now faces a very uncertain 1990's decade. The key, once more, is to adapt. In addition, agriculture, the most rural of industries, is also one of the most high-tech industrial sectors. Rural location may well prove to be a non-barrier to economic prosperity. [David McGranahan (202) 219-0540] **AG**



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Statistical Indicators

Summary Data

Table 1.—Key Statistical Indicators of the Food & Fiber Sector

	1990	1991					1992		
	Annual	I	II	III	IV	Annual	I F	II F	Annual F
Prices received by farmers (1977=100)	150	146	152	137	141	144	143	—	—
Livestock & products	171	167	165	152	156	160	157	—	—
Crops	128	124	138	122	125	127	129	—	—
Prices paid by farmers, (1977=100)									
Production items	171	173	175	173	173	174	—	—	—
Commodities & services, interest, taxes, & wages	184	188	190	189	189	189	—	—	—
Cash receipts (\$ bil.) 1/	169	162	174	170	166	168	—	—	—
Livestock (\$ bil.)	90	87	84	84	87	85	—	—	—
Crops (\$ bil.)	79	76	90	86	79	83	—	—	—
Market basket (1982-84=100)									
Retail cost	134	137	139	137	—	—	—	—	—
Farm value	114	109	109	105	—	—	—	—	—
Spread	144	153	154	154	—	—	—	—	—
Farm value/retail cost (%)	30	29	28	27	—	—	—	—	—
Retail prices (1982-84=100)									
Food	132	136	137	136	137	137	—	—	—
At home	132	136	137	135	136	136	—	—	—
Away from home	133	136	137	139	141	138	—	—	—
Agricultural exports (\$ bil.) 2/	40.1	11.3	8.8	8.4	—	37.5	—	—	39.0
Agricultural imports (\$ bil.) 2/	22.5	5.8	5.5	5.3	—	22.8	—	—	22.0
Commercial production									
Red meat (mil. lb.)	38,608	9,465	9,636	9,985	10,338	39,474	9,792	10,202	40,957
Poultry (mil. lb.)	23,635	5,837	6,298	6,480	6,345	24,937	6,090	6,515	25,845
Eggs (mil. doz.)	5,660	1,418	1,416	1,437	1,462	5,732	1,435	1,425	5,770
Milk (bil. lb.)	148.3	37.5	38.6	36.3	36.2	148.6	37.8	38.8	149.6
Consumption, per capita *									
Red meat and poultry (lb.)	210.8	50.9	53.3	54.6	56.8	215.6	52.8	55.3	222.5
Corn beginning stocks (mil. bu.) 3/	1,930.4	1,344.5	6,940.3	4,789.0	2,992.0	1,344.5	1,520.9	—	—
Corn use (mil. bu.) 3/	6,113.4	2,338.1	2,151.6	1,798.2	1,472.6	7,760.6	—	—	7,775.0
Prices 4/									
Choice steers—Neb. Direct (\$/cwt)**	78.56	80.09	77.92	69.15	70-71	74-75	71-77	73-79	73-79
Barrows & gilts—7 mths. (\$/cwt)	54.45	51.80	53.34	50.85	39-40	48-49	40-46	41-47	39-45
Broilers—12-city (cts./lb.)	54.6	51.2	52.2	54.2	49-50	51-52	47-53	47-53	47-53
Eggs—NY gr. A large (cts./doz.)	82.2	85.9	70.2	77.1	77-78	77-78	72-76	69-75	72-78
Milk—all at plant (\$/cwt)	13.73	11.60	11.37	12.30	13.50-13.70	12.20-12.25	12.25-13.25	10.85-11.85	11.85-12.85
Wheat—KC HRW ordinary (\$/bu.)	3.44	2.81	3.00	3.11	—	—	—	—	—
Corn—Chicago (\$/bu.)	2.51	2.45	2.51	2.47	—	—	—	—	—
Soybeans—Chicago (\$/bu.)	5.93	5.70	5.73	5.65	—	—	—	—	—
Cotton—Avg. spot 41-34 (cts./lb.)	71.3	75.4	81.0	66.7	—	—	—	—	—
	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F
Gross cash income (\$ bil.)	155.5	157.2	152.8	165.1	171.9	179.9	186.0	183	179-188
Gross cash expenses (\$ bil.)	119.0	109.3	105.0	109.8	114.5	120.6	124.2	128	125-132
Net cash income (\$ bil.)	36.6	47.9	47.8	55.3	57.4	59.4	61.8	58	52-57
Net farm income (\$ bil.)	26.3	31.0	31.0	39.7	40.6	50.1	50.8	44	40-46
Farm real estate values 5/									
Nominal (\$ per acre)	801	713	640	599	632	661	668	682	—
Real (1982 \$)	771	662	577	526	538	545	529	519	—

1/ Quarterly data seasonally adjusted at annual rates. 2/ Annual data based on Oct.-Sept. fiscal years ending with year indicated. 3/ Sept.-Nov. first quarter; Dec.-Feb. second quarter; Mar.-May third quarter; Jun.-Aug. fourth quarter; Sept.-Aug. annual. Use includes exports & domestic disappearance. 4/ Simple averages, Jan.-Dec. 5/ 1990-91 values as of January 1. 1986-89 values as of February 1. 1983-85 values as of April 1. F = forecast. — = not available.

* The pork carcass to retail conversion factor has been revised. ** Omaha Choice steer price has been replaced by the Nebraska Direct, 1,100-1,300 lb. Choice steer price.

U.S. & Foreign Economic Data

Table 2.—U.S. Gross National Product & Related Data

	Annual			1990		1991		
	1988	1989	1990	III	IV	I	II	III P
\$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,908.2	5,248.2	5,524.5	5,578.8	5,583.2	5,811.7	5,660.6	5,720.5
Personal consumption expenditures	3,298.1	3,517.9	3,742.6	3,785.2	3,812.0	3,827.7	3,868.5	3,915.8
Durable goods	437.1	459.8	465.9	467.1	451.9	440.7	440.0	452.8
Nondurable goods	1,073.8	1,148.9	1,217.7	1,228.4	1,248.4	1,248.3	1,252.9	1,258.9
Clothing & shoes	186.4	200.5	208.7	211.0	206.8	208.2	212.8	215.0
Food & beverages	533.6	563.3	595.8	601.1	604.8	616.3	620.5	621.2
Services	1,785.2	1,911.2	2,059.0	2,089.6	2,113.6	2,140.7	2,175.6	2,204.1
Gross private domestic investment	793.6	837.6	802.6	821.8	750.9	709.3	708.8	742.0
Fixed investment	777.4	801.6	802.7	807.7	787.4	748.4	745.8	745.3
Change in business inventories	16.2	36.0	0.0	14.1	-36.5	-39.2	-37.1	-3.3
Net exports of goods & services	-108.0	-82.9	-74.4	-82.5	-76.6	-36.8	-17.2	-38.8
Government purchases of goods & services	918.7	971.4	1,042.9	1,046.0	1,071.2	1,088.8	1,092.5	1,088.4
1987 \$ billion (quarterly data seasonally adjusted at annual rates)								
Gross national product	4,726.3	4,840.7	4,894.6	4,909.2	4,877.7	4,843.7	4,847.8	4,872.3
Personal consumption expenditures	3,162.4	3,223.1	3,262.6	3,281.2	3,251.8	3,241.1	3,252.4	3,270.6
Durable goods	428.7	440.8	438.9	440.3	424.0	410.8	408.9	418.2
Nondurable goods	1,035.1	1,049.3	1,050.8	1,053.7	1,044.7	1,043.9	1,046.2	1,048.1
Clothing & shoes	176.9	187.9	187.4	188.2	184.1	181.7	186.1	185.1
Food & beverages	513.4	513.3	515.6	517.1	515.9	518.7	517.0	518.7
Services	1,698.5	1,732.9	1,773.0	1,787.3	1,783.1	1,786.3	1,797.2	1,804.3
Gross private domestic investment	773.4	789.2	744.6	760.3	696.6	657.0	656.3	687.6
Fixed investment	753.4	756.6	744.2	748.4	727.6	689.8	686.8	687.1
Change in business inventories	19.9	32.6	0.2	13.9	-31.2	-32.8	-30.4	0.4
Net exports of goods & services	-104.0	-75.7	-51.3	-65.7	-31.2	-18.6	-12.3	-32.3
Government purchases of goods & services	886.8	900.4	929.1	927.5	937.9	944.5	944.3	935.2
GNP implicit price deflator (% change)	3.3	4.1	4.1	3.7	2.8	5.2	4.5	1.8
Disposable personal income (\$ bil.)	3,479.2	3,725.5	3,946.1	3,969.1	4,001.9	4,021.3	4,068.1	4,107.7
Disposable per. income (1982 \$ bil.)	2,800.6	2,869.0	2,893.5	2,898.0	2,872.4	2,861.9	2,877.9	2,892.5
Per capita disposable per. income (\$)	14,123	14,973	15,695	15,765	15,849	15,887	16,035	16,145
Per capita dis. per. income (1982 \$)	11,368	11,531	11,509	11,511	11,376	11,307	11,343	11,369
U.S. population, total, incl. military abroad (mil.)	246.4	248.8	251.4	251.8	252.5	253.1	253.7	254.4
Civilian population (mil.)	244.1	246.6	249.2	249.6	250.4	250.9	251.5	252.3
	Annual			1990		1991		
	1988	1989	1990	Oct	July	Aug	Sept	Oct
Monthly data seasonally adjusted								
Industrial production (1987=100)	105.4	108.1	109.2	109.6	109.1	108.0	108.2	108.2
Leading economic indicators (1982=100)	142.7	144.9	144.0	141.5	145.5	145.5	145.3	145.5
Civilian employment (mil. persons)	115.0	117.3	117.9	117.7	116.7	116.4	117.2	117.0
Civilian unemployment rate (%)	5.4	5.2	5.4	5.7	6.8	6.8	6.7	6.8
Personal income (\$ bil. annual rate)	4,070.8	4,384.3	4,645.5	4,695.9	4,802.4	4,825.8	4,846.8	4,857.2
Money stock—M2 (daily avg.) (\$ bil.) 1/	3,069.9	3,223.1	3,327.8	3,324.5	3,389.2	3,389.0	3,388.9	3,396.9
Three-month Treasury bill rate (%)	6.69	8.12	7.51	7.19	5.58	6.39	5.25	5.03
AAA corporate bond yield (Moody's) (%)	9.71	9.28	9.32	9.53	9.00	8.75	8.81	8.55
Housing starts (1,000) 2/	1,488	1,378	1,193	1,026	1,049	1,056	1,021	1,096
Auto sales at retail, total (mil.)	10.8	9.9	9.5	9.3	9.1	8.3	8.6	8.2
Business inventory/sales ratio	1.49	1.51	1.51	1.50	1.49	1.49	1.50	—
Sales of all retail stores (\$ bil.)	137.6	145.1	150.6	152.0	153.2	152.2	153.0 P	152.9
Nondurable goods stores (\$ bil.)	85.3	90.8	96.0	97.7	99.1	98.8	98.5 P	98.3
Food stores (\$ bil.)	27.2	28.8	30.2	30.5	31.0	30.8	31.1 P	31.1
Eating & drinking places (\$ bil.)	13.9	14.5	15.2	15.2	15.8	15.9	15.8 P	15.9
Apparel & accessory stores (\$ bil.)	7.1	7.8	7.9	7.8	8.2	8.2	8.1 P	8.0
	Annual			1990		1991		
	1988	1989	1990	Nov	Aug	Sept	Oct	Nov
Foreign exchange value of the dollar								
Japanese yen per U.S. dollar	128.2	138.1	145.0	129.2	136.8	134.3	130.8	129.7
German marks per U.S. dollar	1.757	1.881	1.617	1.486	1.744	1.693	1.670	1.620
Canadian dollar per U.S. dollar	1.231	1.184	1.167	1.164	1.145	1.137	1.120	1.130

1/ Annual data as of December of the year listed. 2/ Private, including farm. R = revised. P = preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 3.—Foreign Economic Growth, Inflation, & Export Earnings

	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F	Average 1981-90
Annual percent change												
World, less U.S.												
Real GDP	1.4	2.3	3.3	3.0	3.2	3.1	4.1	3.2	1.8	0.2	2.6	2.7
Consumer prices	13.7	12.6	13.5	14.2	9.9	12.2	19.9	39.2	46.6	41.4	26.1	19.5
Merch. exports	-6.7	-1.1	5.9	0.6	10.6	17.9	12.3	6.9	14.2	-1.4	5.6	5.8
Developed less U.S.												
Real GDP	1.1	2.1	3.4	3.4	2.6	3.3	4.4	3.6	3.5	2.2	2.7	2.9
Consumer prices	8.3	6.0	4.9	4.6	2.6	2.6	2.9	4.3	4.3	4.5	3.7	5.1
Merch. exports	-4.4	-0.5	6.3	4.6	10.4	17.8	12.2	6.0	17.1	2.1	5.0	7.5
Central Europe & USSR												
Real GDP	2.4	2.7	2.0	0.7	3.5	1.2	1.7	1.0	-6.6	-14.0	-1.3	0.9
Consumer prices	15.8	7.0	7.0	9.3	10.8	13.2	22.2	92.8	82.1	213.3	149.3	26.8
Merch. exports	7.9	2.7	0.9	-2.7	5.4	8.4	4.7	-1.7	-5.6	-21.3	3.2	2.1
Developing												
Real GDP	1.6	2.6	4.4	4.0	6.0	4.3	4.9	3.7	2.8	2.8	4.7	3.6
Consumer prices	29.6	40.1	48.0	50.3	32.2	41.4	71.1	103.8	151.8	48.4	21.5	59.8
Merch. exports	-14.3	-3.8	6.7	-5.3	-6.8	21.9	14.8	11.9	12.3	2.5	6.4	3.5
Asia												
Real GDP	5.0	8.4	7.5	6.4	7.0	7.8	9.0	5.3	5.5	6.0	5.2	6.6
Consumer prices	6.0	6.4	6.9	7.8	5.5	7.3	11.4	9.8	8.1	8.7	8.7	7.9
Merch. exports	-0.5	4.6	14.0	-0.9	8.8	30.1	23.2	11.7	11.8	7.0	10.5	11.1
Latin America												
Real GDP	-1.3	-2.7	3.7	3.6	4.4	3.0	0.0	1.3	-0.9	1.2	2.2	1.1
Consumer prices	73.6	108.7	133.5	145.1	87.4	116.6	218.4	345.9	550.5	154.3	55.0	184.0
Merch. exports	-10.5	-1.5	10.2	-7.7	-17.9	13.6	14.1	12.2	8.9	0.0	8.0	2.7
Africa												
Real GDP	2.4	0.7	2.1	2.4	1.8	0.3	2.4	3.1	1.8	3.6	3.5	1.8
Consumer prices	12.3	17.6	19.5	13.0	14.8	13.2	17.9	21.1	14.0	17.8	14.2	16.5
Merch. exports	-27.9	16.1	10.7	-13.5	-17.1	14.3	-2.7	3.5	19.7	-2.3	4.7	-1.5
Middle East												
Real GDP	-3.6	-1.7	-2.0	-1.8	4.3	-1.3	4.6	4.9	0.8	-7.1	13.2	0.7
Consumer prices	13.3	12.3	14.8	12.2	13.3	19.1	19.4	14.5	8.5	15.4	12.2	14.3
Merch. exports	-22.0	-23.0	-10.9	-6.0	-20.4	12.8	1.0	19.4	17.9	-8.4	5.8	-3.8

F = forecast.

Information contact: Alberto Jerardo, (202) 219-0717.

Farm Prices

Table 4.—Indexes of Prices Received & Paid by Farmers, U.S. Average

	Annual			1990						
	1988	1989	1990	Nov	June	July	Aug	Sept	Oct R	Nov P
1977 = 100										
Prices received										
All farm products	138	147	150	147	155	150	147	148	143	141
All crops	128	134	128	124	146	137	135	136	127	127
Food grains	138	156	123	100	108	106	111	118	128	133
Feed grains & hay	120	128	123	113	115	113	117	116	115	116
Feed grains	117	123	118	107	113	112	115	116	114	115
Cotton	95	98	107	112	111	109	111	108	103	103
Tobacco	132	145	149	152	153	153	148	160	159	161
Oil-bearing crops	108	102	92	95	92	89	88	87	84	83
Fruit, all	185	192	192	205	398	384	365	369	273	217
Fresh market 1/	197	203	202	217	449	410	412	440	298	230
Commercial vegetables	140	152	154	166	172	133	121	127	124	184
Fresh market	138	144	144	162	163	120	106	114	110	189
Potatoes & dry beans	124	186	191	132	188	191	132	112	105	104
Livestock & products	150	160	170	169	163	162	158	157	158	155
Meat animals	168	174	193	196	192	188	180	175	176	170
Dairy products	126	140	141	131	117	122	127	132	138	141
Poultry & eggs	118	127	131	129	120	127	125	124	123	121
Prices paid										
Commodities & services										
Interest, taxes, & wage rates	170	178	184	—	—	189	—	—	189	—
Production items	157	165	171	—	—	173	—	—	173	—
Feed	128	136	128	—	—	120	—	—	123	—
Feeder livestock	192	194	213	—	—	214	—	—	203	—
Seed	150	165	165	—	—	163	—	—	163	—
Fertilizer	130	137	131	—	—	136	—	—	132	—
Agricultural chemicals	127	139	139	—	—	153	—	—	153	—
Fuels & energy	167	180	204	—	—	196	—	—	200	—
Farm & motor supplies	145	150	154	—	—	157	—	—	159	—
Autos & trucks	215	223	231	—	—	248	—	—	248	—
Tractors & self-propelled machinery	181	193	202	—	—	210	—	—	216	—
Other machinery	197	208	218	—	—	227	—	—	230	—
Building & fencing	138	141	144	—	—	148	—	—	147	—
Farm services & cash rent	151	161	169	—	—	172	—	—	172	—
Int. payable per acre on farm real estate debt	182	176	174	—	—	173	—	—	173	—
Taxes payable per acre on farm real estate	147	152	167	—	—	162	—	—	162	—
Wage rates (seasonally adjusted)	177	185	191	—	—	202	—	—	202	—
Production items, interest, taxes, & wage rates	160	167	172	—	—	174	—	—	174	—
Ratio, prices received to prices paid (%) 2/	81	83	82	79	82	79	78	78	76	75
Prices received (1910-14=100)	632	674	684	671	706	685	672	675	653	646
Prices paid, etc. (parity index) (1910-14=100)	1,167	1,220	1,265	—	—	1,299	—	—	1,302	—
Parity ratio (1910-14=100) (%) 2/	54	55	54	—	—	53	—	—	50	—

1/ Fresh market for noncitrus; fresh market & processing for citrus. 2/ Ratio of index of prices received to index of prices paid for commodities & services, interest, taxes, & wage rates. Ratio uses the most recent prices paid index. Prices paid data are quarterly & will be published in January, April, July, & October. R = revised. P = Preliminary. — = not available.

Information contact: Ann Duncan (202) 219-0313.

Table 5.—Prices Received by Farmers, U.S. Average

	Annual 1/			1991						
	1988	1989	1990	Nov	June	July	Aug	Sept	Oct R	Nov P
CROPS										
All wheat (\$/bu.)	3.72	3.72	2.81	2.39	2.55	2.49	2.63	2.80	3.09	3.21
Rice, rough (\$/cwt)	8.83	7.35	6.73	6.30	7.40	7.28	7.09	7.61	7.58	7.58
Corn (\$/bu.)	2.54	2.38	2.30	2.16	2.31	2.27	2.33	2.34	2.30	2.29
Sorghum (\$/cwt)	4.05	3.79	3.75	3.57	3.89	3.96	4.01	4.10	3.93	4.07
All hay, baled (\$/ton)	85.20	86.00	86.00	81.40	71.60	70.60	71.50	68.10	68.80	69.10
Soybeans (\$/bu.)	7.42	5.70	5.75	5.77	5.55	5.36	5.66	5.64	5.49	5.42
Cotton, upland (cts./lb.)	55.6	66.2	67.8	68.4	67.2	65.7	66.9	65.2	62.5	62.4
Potatoes (\$/cwt)	6.02	7.36	6.15	5.24	8.18	8.05	5.52	4.82	4.25	4.13
Lettuce (\$/cwt) 2/	14.70	12.60	11.50	18.70	9.46	6.65	7.97	11.30	10.60	28.80
Tomatoes fresh (\$/cwt) 2/	27.10	33.10	27.40	30.90	56.40	29.10	22.50	21.90	20.80	30.60
Onions (\$/cwt)	9.75	11.40	10.50	9.54	14.60	17.00	11.90	10.10	8.60	9.08
Dry edible beans (\$/cwt)	29.90	28.50	18.50	18.90	17.80	21.40	15.90	14.40	14.40	15.70
Apples for fresh use (cts./lb.)	17.4	13.9	20.9	19.6	24.2	24.8	24.6	29.1	24.9	25.3
Pears for fresh use (\$/ton)	358.00	336.00	349.00	344.00	754.00	—	399.00	477.00	411.00	401.00
Oranges, all uses (\$/box) 3/	7.18	7.08	5.99	6.44	21.35	19.48	20.81	21.97	11.09	5.91
Grapefruit, all uses (\$/box) 3/	5.43	4.45	6.21	6.03	5.44	4.82	2.86	1.38	6.24	6.16
LIVESTOCK										
Beef cattle (\$/cwt)	66.80	69.67	74.79	75.30	73.60	71.60	68.80	66.60	70.40	69.60
Calves (\$/cwt)	89.85	91.84	96.51	93.80	106.00	103.00	98.30	96.10	93.90	90.00
Hogs (\$/cwt)	42.54	43.24	53.99	50.20	54.70	54.20	51.20	48.40	43.60	38.20
Lambs (\$/cwt)	69.50	67.33	56.01	50.10	55.30	57.70	53.40	53.60	51.70	50.20
All milk, sold to plants (\$/cwt)	12.26	13.56	13.78	12.70	11.40	11.80	12.30	12.80	13.40	13.70
Milk, manuf. grade (\$/cwt)	11.15	12.38	12.33	10.60	10.40	10.80	11.40	12.10	12.70	12.90
Broilers (cts./lb.)	34.0	36.1	32.4	27.9	31.4	32.6	32.3	32.1	31.1	29.6
Eggs (cts./doz.) 4/	53.2	70.0	70.4	73.1	59.3	65.0	63.8	63.0	63.8	64.0
Turkeys (cts./lb.)	36.9	40.0	38.4	42.3	39.7	40.0	40.7	40.2	38.9	40.0
Wool (cts./lb.) 5/	138.0	124.0	76.8	56.0	71.8	56.4	63.0	53.9	66.6	51.4

1/ Season average price by crop year for crops. Calendar year average of monthly prices for livestock. 2/ Excludes Hawaii. 3/ Equivalent on-tree returns. 4/ Average of all eggs sold by producers including hatching eggs & eggs sold at retail. 5/ Average local market price, excluding incentive payments. R = revised. P = preliminary. — not available.

Information contact: Ann Duncan (202) 219-0313.

Producer & Consumer Prices

Table 6.—Consumer Price Index for All Urban Consumers, U.S. Average (Not Seasonally Adjusted)

	Annual	1990	1991							
	1990	Oct	Mar	Apr	May	June	July	Aug	Sept	Oct
1982-84=100										
Consumer Price Index, all items	130.7	133.5	135.0	135.2	135.6	136.0	136.2	136.6	137.2	137.4
Consumer Price Index, less food	130.3	133.5	134.8	134.9	135.4	135.7	136.1	136.7	137.4	137.7
All food	132.4	133.6	135.8	136.7	136.8	137.2	136.5	136.0	136.0	135.8
Food away from home	133.4	135.0	136.5	137.1	137.5	137.9	138.4	138.7	138.9	139.1
Food at home	132.3	133.4	136.0	137.0	136.9	137.4	136.0	134.9	134.9	134.4
Meats 1/	128.5	131.7	133.1	132.7	133.4	133.5	133.1	132.9	131.9	131.3
Beef & veal	128.8	130.1	132.9	133.4	134.1	133.2	132.6	132.3	131.0	130.7
Pork	129.8	136.4	135.2	133.3	134.2	136.1	136.7	135.7	134.1	132.7
Poultry	132.6	133.7	131.9	131.1	132.7	131.5	132.5	132.4	131.0	131.0
Fish	146.7	147.0	149.6	148.2	147.0	146.7	146.1	145.2	147.8	149.4
Eggs	124.1	125.5	133.1	124.8	112.4	110.2	113.9	121.0	118.0	116.8
Dairy products 2/	126.5	128.6	124.9	124.5	124.4	123.9	124.0	124.5	125.3	125.7
Fats & oils 3/	126.3	128.1	132.5	133.0	132.6	131.6	131.6	132.1	131.1	131.7
Fresh fruit	170.9	163.2	195.9	202.3	204.8	204.4	198.8	167.4	194.3	185.4
Processed fruit	136.9	139.5	132.2	132.3	132.1	131.2	130.6	130.9	131.3	130.5
Fresh vegetables	151.1	142.2	151.1	169.2	167.3	180.5	157.7	142.2	137.6	134.0
Potatoes	182.6	139.9	139.6	144.4	149.1	165.8	164.3	156.2	143.7	132.1
Processed vegetables	127.5	127.9	128.2	128.4	128.7	130.0	129.3	128.7	128.1	128.7
Cereals & bakery products	140.0	141.9	144.3	145.2	145.3	145.7	145.8	146.5	146.5	146.9
Sugar & sweets	124.7	126.6	128.3	128.2	129.2	129.6	129.9	130.3	129.6	130.5
Beverages, nonalcoholic	113.5	115.2	114.9	115.5	114.9	113.9	113.1	112.9	112.8	113.9
Apparel										
Apparel, commodities less footwear	122.8	127.4	127.7	129.1	128.3	125.2	123.2	123.2	130.4	132.0
Footwear	117.4	120.5	120.8	121.9	121.7	120.2	119.3	120.2	122.2	123.4
Tobacco & smoking products	181.5	185.9	197.6	199.2	199.6	202.9	203.7	204.7	205.7	206.1
Beverages, alcoholic	129.3	131.0	142.2	142.6	142.7	143.0	143.4	143.8	144.4	144.5

1/ Beef, veal, lamb, pork, & processed meat. 2/ Includes butter. 3/ Excludes butter.

Information contact: Ann Duncan (202) 219-0313.

Table 7.—Producer Price Indexes, U.S. Average (Not Seasonally Adjusted)

	Annual			1990	1991					
	1988	1989	1990	Oct	May	June R	July	Aug	Sept	Oct
	1982 = 100									
Finished goods 1/	108.0	113.6	119.2	122.3	121.8	121.9	121.8	121.7	121.3	122.3
Consumer foods	112.6	118.7	124.4	124.6	125.8	125.3	124.6	123.4	122.7	123.0
Fresh fruit	113.5	113.2	118.1	119.7	134.9	140.3	145.0	134.2	132.9	122.5
Fresh & dried vegetables	105.5	118.7	118.1	101.5	148.7	135.7	107.4	91.4	87.7	78.1
Dried fruit	99.1	103.0	108.7	108.0	111.4	111.4	111.8	110.9	111.5	111.9
Canned fruit & juice	120.2	122.7	127.0	127.7	127.2	127.0	128.5	128.8	129.6	130.3
Frozen fruit & juice	129.8	123.9	139.0	137.0	112.7	112.7	112.7	109.5	108.9	116.5
Fresh veg. excl. potatoes	100.4	103.9	107.8	96.2	157.0	138.0	102.0	82.6	81.8	73.5
Canned veg. & juices	108.3	119.8	116.7	114.6	114.0	113.3	113.1	111.9	110.9	111.2
Frozen vegetables	108.6	115.5	118.4	118.6	118.1	117.5	117.5	117.8	117.4	116.8
Potatoes	113.9	153.8	157.3	131.0	138.1	146.7	137.6	123.7	110.6	97.0
Eggs	88.6	119.6	117.6	121.6	94.6	96.9	100.7	109.0	105.8	105.0
Bakery products	126.4	135.4	141.0	142.4	145.8	146.2	146.1	146.9	147.5	147.7
Meats	99.9	104.8	117.0	119.7	117.8	117.4	118.1	111.2	108.1	108.7
Beef & veal	101.4	108.9	116.0	117.4	117.3	115.5	111.6	104.8	104.5	106.9
Pork	95.0	97.7	119.8	124.7	118.4	120.0	121.8	117.0	107.9	108.4
Processed poultry	111.8	120.4	113.8	110.1	112.2	111.8	113.3	113.5	112.8	111.2
Fish	148.7	142.9	147.2	146.2	157.3	142.3	146.6	139.5	142.0	153.1
Dairy products	102.2	110.8	117.2	117.4	111.5	112.1	113.8	115.1	115.9	119.1
Processed fruits & vegetables	113.8	119.9	124.7	123.6	119.3	119.0	119.2	118.4	118.2	119.2
Shortening & cooking oil	118.8	116.6	123.2	122.1	116.6	114.9	111.8	117.4	114.9	114.2
Soft drinks	114.3	177.7	122.3	122.3	125.1	125.1	125.8	125.1	124.6	125.3
Consumer finished goods less foods	103.1	108.9	115.3	120.8	118.2	118.8	118.3	119.0	118.8	119.7
Beverages, alcoholic	111.8	115.2	117.2	117.1	123.5	123.4	123.9	123.4	123.3	123.1
Apparel	111.7	114.5	117.5	118.1	119.3	119.6	119.8	120.0	120.0	120.4
Footwear	115.1	120.8	125.6	126.2	128.7	128.8	128.7	129.4	129.4	129.2
Tobacco products	171.9	194.8	221.4	224.9	243.4	249.1	254.3	254.9	254.7	255.0
Intermediate materials 2/	107.1	112.0	114.5	117.9	114.0	114.3	114.0	114.3	114.5	114.1
Materials for food manufacturing	108.0	112.7	117.9	117.3	115.5	115.4	115.5	115.4	114.5	115.3
Flour	105.7	114.6	103.8	93.9	96.3	96.0	93.1	96.3	98.2	102.6
Refined sugar 3/	108.9	118.2	122.7	123.0	121.3	121.3	121.4	121.3	121.4	121.2
Crude vegetable oils	116.6	103.1	115.8	115.2	102.5	102.7	95.9	101.3	100.9	100.7
Crude materials 4/	96.0	103.1	108.9	124.8	102.1	99.8	99.4	99.2	98.0	99.8
Foodstuffs & feedstuffs	106.1	111.2	113.1	110.5	108.7	107.4	104.9	102.5	102.9	102.5
Fruits & vegetables 5/	108.5	114.8	117.5	109.0	141.9	137.0	123.4	109.7	107.0	97.2
Grains	97.9	106.4	97.4	85.8	92.7	90.2	84.3	93.2	92.4	95.3
Livestock	103.3	106.1	115.6	116.5	115.2	112.8	110.2	100.7	101.1	100.9
Poultry, live	121.5	128.8	118.8	110.2	113.9	112.7	119.2	120.4	118.7	109.1
Fibers, plant & animal	98.4	107.8	117.8	116.4	139.2	130.8	120.2	108.7	103.5	96.3
Fluid milk	89.4	98.8	100.8	95.4	83.4	85.1	86.6	90.3	93.3	96.0
Oilseeds	134.0	123.8	112.1	119.8	107.5	108.7	99.3	104.2	107.0	102.1
Tobacco, leaf	87.2	93.8	95.8	98.3	99.6	99.8	99.8	98.3	102.8	103.5
Sugar, raw cane	111.9	115.5	119.2	119.8	112.8	113.5	112.6	114.0	114.4	114.2
All commodities	106.9	112.2	116.3	120.8	116.5	116.4	116.0	116.2	116.0	116.4
Industrial commodities	106.3	111.6	115.8	121.4	116.1	116.1	116.0	116.4	116.2	116.8
All foods 6/	111.5	117.8	123.2	123.1	124.2	123.5	122.7	121.5	120.7	121.1
Farm products & processed foods & feeds	110.0	115.4	118.6	117.9	118.3	117.6	116.3	115.3	115.0	115.0
Farm products	104.9	110.9	112.2	109.5	110.4	109.1	105.2	102.6	102.8	101.2
Processed foods & feeds 6/	112.7	117.8	121.9	122.2	122.3	121.9	121.8	121.6	121.1	122.0
Cereal & bakery products	123.0	131.1	134.2	134.2	137.4	137.8	137.1	138.1	138.6	139.7
Sugar & confectionery	114.7	120.1	123.1	123.0	127.8	127.6	130.3	130.0	130.6	128.5
Beverages	114.3	118.4	120.8	120.3	124.3	124.2	123.8	123.1	123.1	123.2

1/ Commodities ready for sale to ultimate consumer. 2/ Commodities requiring further processing to become finished goods. 3/ All types & sizes of refined sugar. 4/ Products entering market for the first time that have not been manufactured at that point. 5/ Fresh & dried. 6/ Includes all raw, intermediate, & processed foods (excludes soft drinks, alcoholic beverages, & manufactured animal feeds). R = revised.

Information contact: Ann Duncan (202) 219-0313.

Farm-Retail Price Spreads

Table 8.—Farm-Retail Price Spreads

	Annual			1990						
	1988	1989	1990	Oct	May	June	July	Aug	Sept	Oct
Market basket 1/										
Retail cost (1982-84=100)	116.5	124.6	133.5	134.6	138.4	139.2	137.7	136.8	136.6	135.9
Farm value (1982-84=100)	100.5	107.1	113.3	110.9	110.9	109.7	107.2	104.5	103.0	101.0
Farm-retail spread (1982-84=100)	125.1	134.1	144.4	147.4	153.1	155.0	154.1	154.1	154.6	154.7
Farm value-retail cost (%)	30.2	30.1	29.7	28.9	26.1	27.6	27.3	26.9	26.4	26.0
Meat products										
Retail cost (1982-84=100)	112.2	116.7	128.5	131.7	133.4	133.5	133.1	132.9	131.9	131.3
Farm value (1982-84=100)	99.5	103.3	116.6	119.2	117.0	115.3	112.6	108.6	102.8	103.3
Farm-retail spread (1982-84=100)	125.2	130.4	140.6	144.5	150.2	152.2	153.9	157.8	161.7	160.0
Farm value-retail cost (%)	44.9	44.6	46.0	45.9	44.4	43.7	42.9	41.4	39.5	39.8
Dairy products										
Retail cost (1982-84=100)	108.4	115.6	126.5	126.6	124.4	123.9	124.0	124.5	125.3	125.7
Farm value (1982-84=100)	90.6	99.1	101.9	99.0	84.9	85.9	87.8	90.5	92.1	93.5
Farm-retail spread (1982-84=100)	124.7	130.6	149.2	155.9	160.8	159.0	157.4	155.8	155.9	155.4
Farm value-retail cost (%)	40.1	41.1	38.6	36.9	32.7	33.2	34.0	34.9	35.3	35.7
Poultry										
Retail cost (1982-84=100)	120.7	132.7	132.5	133.7	132.7	131.5	132.5	132.4	131.0	131.0
Farm value (1982-84=100)	110.2	117.1	107.6	99.0	103.7	104.3	107.7	107.2	106.5	103.0
Farm-retail spread (1982-84=100)	132.8	150.6	161.1	173.7	166.1	162.8	161.0	161.4	159.3	163.1
Farm value-retail cost (%)	48.9	47.2	43.5	39.6	41.8	42.5	43.5	43.3	43.5	42.1
Eggs										
Retail cost (1982-84=100)	93.8	118.5	124.1	125.5	112.4	110.2	113.9	121.0	118.0	116.8
Farm value (1982-84=100)	76.7	107.5	108.0	114.3	85.4	85.2	96.6	95.4	93.7	95.0
Farm-retail spread (1982-84=100)	123.9	138.1	153.2	145.7	160.9	155.0	145.0	167.0	161.7	155.9
Farm value-retail cost (%)	52.7	58.3	55.9	58.5	48.6	49.7	54.5	50.6	51.0	52.3
Cereal & bakery products										
Retail cost (1982-84=100)	122.1	132.4	140.0	141.9	145.3	145.7	145.8	146.5	146.5	148.9
Farm value (1982-84=100)	92.7	101.7	90.5	78.7	85.4	82.9	81.0	82.9	87.2	90.3
Farm-retail spread (1982-84=100)	126.2	136.7	148.9	150.7	153.7	154.5	154.6	155.4	154.8	154.8
Farm value-retail cost (%)	9.3	9.4	7.9	6.8	7.2	7.0	6.8	6.9	7.3	7.5
Fresh fruits										
Retail cost (1982-84=100)	145.4	154.7	174.6	167.2	207.3	209.7	203.8	195.9	203.0	194.6
Farm value (1982-84=100)	116.5	108.5	126.0	126.6	184.2	208.1	174.6	185.9	176.0	143.9
Farm-retail spread (1982-84=100)	158.7	176.0	196.0	185.9	218.0	210.4	217.3	209.8	215.5	216.0
Farm value-retail cost (%)	25.3	22.2	23.2	23.9	28.1	31.3	27.1	26.7	27.4	23.4
Fresh vegetables										
Retail cost (1982-84=100)	129.3	143.1	151.1	142.2	167.3	180.5	157.7	142.2	137.6	134.0
Farm value (1982-84=100)	105.8	123.3	124.2	100.7	161.6	134.2	119.2	93.0	91.6	76.6
Farm-retail spread (1982-84=100)	141.3	153.2	165.0	163.5	170.1	204.3	177.5	167.5	161.2	162.5
Farm value-retail cost (%)	27.8	29.3	27.9	24.1	32.8	25.3	25.7	22.2	22.6	19.9
Processed fruits & vegetables										
Retail cost (1982-84=100)	117.6	125.0	132.7	134.3	130.5	130.5	129.9	129.8	129.8	129.6
Farm value (1982-84=100)	136.6	133.8	147.2	152.5	125.0	124.5	123.4	123.3	122.9	120.9
Farm-retail spread (1982-84=100)	111.7	122.3	128.1	128.6	132.2	132.4	131.9	131.8	131.9	132.3
Farm value-retail cost (%)	27.6	25.4	26.4	27.0	22.8	22.7	22.6	22.6	22.5	22.2
Fats & oils										
Retail cost (1982-84=100)	113.1	121.2	126.3	128.1	132.6	131.6	131.6	132.1	131.1	131.7
Farm value (1982-84=100)	103.0	95.6	107.1	107.9	100.0	96.4	93.8	96.2	95.2	92.4
Farm-retail spread (1982-84=100)	116.8	130.6	133.4	135.5	144.6	144.6	145.5	145.3	144.3	146.1
Farm value-retail cost (%)	24.5	21.2	22.8	22.7	20.3	19.7	19.2	19.6	19.5	18.9
	Annual			1991						
	1988	1989	1990	Nov	June	July	Aug	Sept	Oct	Nov
Beef, Choice										
Retail price 2/ (cts./lb.)	250.3	265.7	281.0	291.6	292.4	288.4	285.4	280.1	277.2	281.0
Wholesale value 3/ (cets.)	169.4	176.8	189.6	197.6	186.1	178.8	172.2	170.8	174.5	175.1
Net farm value 4/ (cets.)	148.3	157.6	168.4	174.7	160.9	156.2	145.1	146.8	149.8	152.5
Farm-retail spread (cets.)	102.0	108.1	112.6	116.9	131.5	132.2	140.3	133.3	127.4	128.5
Wholesale-retail 5/ (cets.)	80.9	88.9	91.4	94.0	106.3	109.6	113.2	109.3	102.7	105.9
Farm-wholesale 6/ (cets.)	21.1	19.2	21.2	22.9	25.2	22.6	27.1	24.0	24.7	22.6
Farm value-retail price (%)	59	59	60	60	55	54	51	52	54	54
Pork										
Retail price 2/ (cets./lb.)	183.4	182.9	212.6	222.9	214.6	217.7	214.2	211.9	207.7	205.1
Wholesale value 3/ (cets.)	101.0	99.2	118.3	119.7	116.0	115.7	111.5	107.1	104.6	97.8
Net farm value 4/ (cets.)	69.4	70.4	87.2	79.1	87.7	89.0	81.2	74.7	69.4	60.6
Farm-retail spread (cets.)	114.0	112.5	125.4	143.8	126.9	128.7	133.0	137.2	138.3	144.5
Wholesale-retail 5/ (cets.)	82.4	83.7	94.3	103.2	98.6	102.0	102.7	104.8	103.1	107.5
Farm-wholesale 6/ (cets.)	31.6	28.8	31.1	40.6	28.3	26.7	30.3	32.4	35.2	37.0
Farm value-retail price (%)	38	38	41	35	41	41	38	35	33	30

1/ Retail costs are based on CPI-U of retail prices for domestically produced farm foods, published monthly by BLS. The farm value is the payment for the quantity of farm equivalent to the retail unit, less allowance for byproduct. Farm values are based on prices at first point of sale & may include marketing charges such as grading & packing for some commodities. The farm-retail spread, the difference between the retail price & the farm value, represents charges for assembling, processing, transporting, distributing. 2/ Weighted average price of retail cuts from pork & choice yield grade 3 beef. Prices from BLS. 3/ Value of wholesale (boxed beef) & wholesale cuts (pork) equivalent to 1 lb. of retail cuts adjusted for transportation costs & byproduct values. 4/ Market value to producer for live animal equivalent to 1 lb. of retail cuts, minus value of byproducts. 5/ Charges for retailing & other marketing services such as wholesaling, and in-city transportation. 6/ Charges for livestock marketing, processing, & transportation.

Information contacts: Denis Ounham (202) 219-0870, Larry Duewer (202) 219-0712.

Table 9.—Price Indexes of Food Marketing Costs

(See the December 1991 issue)

Information contact: Denis Dunham (202) 219-0870.

Livestock & Products

Table 10.—U.S. Meat Supply & Use

	Beg. stocks	Produc- tion 1/	Imports	Total supply	Exports	Ending stocks	Consumption		Primary market price 3/
							Total	Per capita 2/	
Million pounds 4/							Pounds		
Beef									
1989	422	23,087	2,179	25,688	1,023	335	24,330	69.3	73.88
1990	335	22,743	2,356	25,434	1,006	397	24,031	67.8	78.56
1991 F	397	22,973	2,320	25,690	1,150	375	24,165	67.5	74-75
1992 F	375	23,284	2,280	25,939	1,245	325	24,389	67.5	73-79
Pork									
1989	437	15,813	898	17,146	262	313	16,571	52.0	44.03
1990	313	15,354	898	16,565	239	296	16,030	49.8	54.45
1991 F	298	16,018	819	17,133	281	425	16,447	50.8	48-49
1992 F	425	17,204	855	18,484	270	375	17,839	54.4	39-45
Veal 5/									
1989	5	355	0	360	0	4	356	1.2	91.84
1990	4	327	0	331	0	6	325	1.1	96.51
1991 F	6	300	0	306	0	5	301	1.0	100-101
1992 F	5	280	0	285	0	4	281	0.9	94-100
Lamb & mutton									
1989	6	347	63	416	2	8	408	1.5	67.32
1990	8	363	59	430	3	8	419	1.5	55.64
1991 F	8	362	61	431	3	7	421	1.5	53-54
1992 F	7	368	60	435	2	9	424	1.5	49-55
Total red meat									
1989	870	39,602	3,138	43,610	1,287	660	41,663	124.0	—
1990	660	38,787	3,313	42,760	1,248	707	40,805	120.1	—
1991 F	707	39,653	3,200	43,560	1,414	812	41,334	120.5	—
1992 F	812	41,136	3,195	45,143	1,517	713	42,913	124.3	—
Broilers									
1989	38	17,424	0	17,460	814	38	16,808	67.1	59.0
1990	38	18,660	0	18,698	1,143	28	17,529	70.1	54.8
1991 F	28	19,877	0	19,903	1,185	40	18,699	74.1	51-52
1992 F	40	20,658	0	20,698	1,160	35	19,503	78.6	47-53
Mature chicken									
1989	157	588	0	725	24	189	511	2.1	—
1990	189	588	0	777	25	224	528	2.1	—
1991 F	224	566	0	790	27	240	523	2.1	—
1992 F	240	570	0	810	25	230	555	2.2	—
Turkeys									
1989	250	4,285	0	4,535	41	236	4,259	17.2	66.7
1990	236	4,734	0	4,970	54	306	4,810	18.4	63.2
1991 F	306	4,857	0	5,163	85	300	4,778	18.9	60-61
1992 F	300	4,982	0	5,282	88	250	4,944	19.4	58-62
Total poultry									
1989	442	22,278	0	22,720	878	483	21,378	88.4	—
1990	483	23,982	0	24,445	1,222	557	22,666	90.7	—
1991 F	557	25,300	0	25,856	1,276	580	24,000	95.1	—
1992 F	580	26,210	0	26,790	1,273	515	25,002	98.2	—
Red meat & poultry									
1989	1,312	61,880	3,138	66,330	2,165	1,123	63,042	210.4	—
1990	1,123	62,769	3,313	67,205	2,470	1,264	63,471	210.8	—
1991 F	1,264	64,953	3,200	69,416	2,690	1,392	65,334	215.6	—
1992 F	1,392	67,346	3,195	71,933	2,790	1,228	67,915	222.6	—

1/ Total including farm production for red meats & federally inspected plus nonfederally inspected for poultry. 2/ Retail weight basis. (The beef carcass-to-retail conversion factor was 70.5) 3/ Dollars per cwt for red meat; cents per pound for poultry. Beef: Medium # 1, Nebraska Direct 1,100-1,300 lb.; pork: barrows & gilts, 7 markets; veal: farm price of calves; lamb & mutton: Choice slaughter lambs, San Angelo; broilers: wholesale 12-city average; turkeys: wholesale NY 8-16 lb. young hens. 4/ Carcass weight for red meats & certified ready-to-cook for poultry. 5/ Beginning 1989 veal trade no longer reported separately. F = forecast. — = not available.

Information contacts: Polly Cochran, or Maxine Davis (202) 219-0767.

Table 11.—U.S. Egg Supply & Use

	Beg. stocks	Production	Imports	Total supply	Exports	Hatch- ing use	Ending stocks	Consumption		
								Total	Per capita	Wholesale price*
				Million dozen					No.	Cts./doz.
1987	10.4	5,868.2	5.6	5,884.2	111.2	599.1	14.4	5,159.5	254.9	61.6
1988	14.4	5,784.2	5.3	5,803.9	141.8	605.9	15.2	5,041.0	246.8	62.1
1989	15.2	5,597.8	25.2	5,638.2	91.6	642.9	10.7	4,893.0	237.3	61.9
1990	10.7	5,659.9	9.1	5,679.6	100.5	675.8	11.6	4,891.7	234.8	62.2
1991 F	11.6	5,731.9	2.1	5,745.6	145.8	706.4	12.0	4,881.8	232.0	77-79
1992 F	12.0	5,770.0	2.4	5,784.4	137.0	740.0	12.0	4,895.4	230.9	72-78

* Cartoned grade A large eggs, New York. F = forecast.

Information contact: Maxine Davis (202) 219-0767.

Table 12.—U.S. Milk Supply & Use

	Production	Farm use	Commercial		Imports	Total commercial supply	CCC net removals	Commercial		All milk price 1/	CCC net removals	
			Farm market- ings	Beg. stock				Ending stocks	Disap- pear- ance		Skim solids basis	Total solids basis 2/
						Billion pounds (milkfat basis)				\$/cwt	Billion pounds	
1984	135.4	2.9	132.4	5.1	2.7	140.2	6.7	4.8	126.7	13.46	12.4	10.9
1985	143.0	2.5	140.6	4.8	2.8	148.2	13.3	4.5	130.4	12.78	17.2	15.8
1986	143.1	2.4	140.7	4.5	2.7	147.9	10.8	4.1	133.0	12.51	14.3	12.9
1987	142.7	2.3	140.5	4.1	2.5	147.1	8.8	4.6	135.7	12.64	9.3	8.3
1988	145.2	2.2	142.9	4.6	2.4	149.9	9.1	4.3	136.5	12.26	5.5	6.9
1989	144.2	2.1	142.2	4.3	2.5	149.0	9.4	4.1	135.5	13.50	0.4	4.0
1990	148.3	2.0	146.3	4.1	2.7	153.1	9.0	5.1	139.0	13.73	1.8	4.6
1991 F	148.6	2.0	146.6	5.1	2.6	154.3	10.0	4.7	139.6	12.25	4.2	6.5

1/ Delivered to plants & dealers; does not reflect deductions. 2/ Arbitrarily weighted average of milkfat basis (40 percent) & skim solids basis (60 percent). F = forecast.

Information contact: Jim Miller (202) 219-0770.

Table 13.—Poultry & Eggs

	Annual			1990		1991				
	1988	1989	1990	Oct	May	June	July	Aug	Sept	Oct
Broilers										
Federally inspected slaughter, certified (mil. lb.)	16,124.4	17,334.2	18,553.9	1,788.6	1,739.9	1,572.1	1,747.7	1,758.2	1,585.3	1,825.4
Wholesale price, 12-city (cts./lb.)	66.3	59.0	54.8	48.8	62.0	52.7	54.3	54.6	53.8	51.6
Price of grower feed (\$/ton)	219	237	218.3	210	209	209	204	202	201	207
Broiler-feed price ratio 1/	3.1	3.0	3.0	2.7	3.0	3.0	3.2	3.2	3.2	3.0
Stocks beginning of period (mil. lb.)	24.8	35.9	38.3	23.9	32.8	36.3	41.9	44.4	40.1	40.3
Broiler-type chicks hatched (mil.) 2/	5,802.4	5,940.9	6,314.6	510.8	583.4	566.7	561.4	558.5	532.8	527.5
Turkeys										
Federally inspected slaughter, certified (mil. lb.)	3,923.4	4,174.6	4,560.9	478.4	398.4	385.0	412.8	424.2	405.9	483.6
Wholesale price, Eastern U.S., 8-16 lb. young hens (cts./lb.)	61.2	66.7	63.2	78.2	62.3	62.7	63.4	64.7	64.4	60.5
Price of turkey grower feed (\$/ton)	243	251	238.4	238.0	236	234	229	226	230	243
Turkey-feed price ratio 1/	3.0	3.2	3.2	3.6	3.3	3.4	3.5	3.6	3.5	3.2
Stocks beginning of period (mil. lb.)	266.2	249.7	235.9	623.6	406.0	451.3	503.1	571.3	625.8	657.2
Poults placed in U.S. (mil.)	261.4	290.7	304.9	21.5	29.6	26.2	26.6	25.6	21.1	22.1
Eggs										
Farm production (mil.)	69,410	67,174	67,919	5,786	5,781	5,809	5,800	5,808	6,630	5,872
Average number of layers (mil.)	277	269	270	270	271	271	271	271	273	276
Rate of lay (eggs per layer on farms)	251	250	251.7	21.5	21.3	20.7	21.5	21.4	20.6	21.3
Cartoned price, New York, grade A large (cts./doz.) 3/	62.1	61.9	62.2	66.5	67.0	68.8	79.6	76.3	75.5	74.5
Price of laying feed (\$/ton)	203	209	202	200	195	194	188	188	188	199
Egg-feed price ratio 1/	5.3	6.7	6.9	7.3	6.1	6.1	6.9	6.8	6.7	6.4
Stocks, first of month										
Shell (mil. doz.)	1.29	0.27	0.36	0.54	0.36	0.45	0.39	0.39	0.30	0.39
Frozen (mil. doz.)	13.1	14.9	10.3	12.6	9.8	10.3	10.8	13.7	12.4	12.8
Replacement chicks hatched (mil.)	366	383	399.0	31.9	38.9	35.5	34.7	33.3	33.9	33.7

1/ Pounds of feed equal in value to 1 dozen eggs or 1 lb. of broiler or turkey five-week-old. 2/ Placement of broiler chicks is currently reported for 15 States only; henceforth, hatch of broiler-type chicks will be used as a substitute. 3/ Price of cartoned eggs to volume buyers for delivery to retailers.

Information contact: Maxine Davis (202) 219-0767.

Table 14.—Dairy

	Annual			1990		1991				
	1988	1989	1990	Oct	May	June	July	Aug	Sept	Oct
Milk prices, Minnesota-Wisconsin, 3.5% fat (\$/cwt) 1/	11.03	12.37	12.21	10.48	10.23	10.58	10.99	11.50	12.02	12.50
Wholesale prices										
Butter, grade A Chi. (cts./lb.)	132.5	127.9	102.1	98.9	97.3	98.1	98.9	98.9	100.7	106.2
Am. cheese, Wis. assembly pt. (cts./lb.)	123.8	138.8	138.7	121.2	115.0	121.4	128.4	138.1	139.7	140.2
Nonfat dry milk (cts./lb.) 2/	79.7	105.5	100.6	88.6	89.1	88.9	92.2	92.2	93.9	114.8
USDA net removals										
Total milk equiv. (mil. lb.) 3/	9,070.1	9,357.0	8,951.2	263.0	1,450.8	672.0	339.2	37.6	181.1	233.1
Butter (mil. lb.)	312.6	413.4	400.3	11.8	6/ 62.8	6/ 27.7	6/ 15.9	6/ 1.7	6/ 8.5	10.6
Am. cheese (mil. lb.)	238.1	37.4	21.5	0	8.2	7.1	-0.5	0	-0.7	0
Nonfat dry milk (mil. lb.)	267.5	0	117.8	22.6	6/ 28.8	6/ 9.4	6/ -0.5	6/ 2.6	6/ 7.4	6/ 8.0
Milk										
Milk prod. 21 States (mil. lb.)	123,518	122,509	125,714	10,223	11,228	10,573	10,472	10,318	9,926	10,198
Milk per cow (lb.)	14,291	14,389	14,788	1,200	1,334	1,260	1,251	1,232	1,188	1,219
Number of milk cows (1,000)	8,643	8,528	8,513	8,519	8,418	8,389	8,388	8,372	8,372	8,367
U.S. milk production (mil. lb.)	145,152	144,239	148,284	7/ 12,088	7/ 13,281	7/ 12,488	7/ 12,374	7/ 12,189	7/ 11,732	7/ 12,058
Stock, beginning										
Total (mil. lb.)	7,473	8,379	9,036	13,448	18,402	19,055	19,519	19,414	18,585	17,498
Commercial (mil. lb.)	4,596	4,256	4,120	5,234	6,289	6,211	6,156	6,190	5,604	5,207
Government (mil. lb.)	2,877	4,122	4,916	8,216	12,113	12,844	13,363	13,225	12,981	12,290
Imports, total (mil. lb.) 3/	2,394	2,499	2,690	248	238	265	234	231	223	—
Commercial disappearance (mil. lb.)	136,574	135,439	138,947	12,050	11,952	11,968	12,081	12,794	12,021	—
Butter										
Production (mil. lb.)	1,207.6	1,295.4	1,302.2	106.7	126.0	98.3	88.9	85.0	84.7	105.2
Stocks, beginning (mil. lb.)	143.2	214.7	256.2	412.3	618.8	647.5	665.6	665.0	633.2	592.3
Commercial disappearance (mil. lb.)	909.8	876.0	916.2	94.1	67.6	76.5	68.0	105.5	87.1	—
American cheese										
Production (mil. lb.)	2,756.0	2,674.1	2,890.8	232.7	247.5	235.2	225.0	224.5	205.8	221.6
Stocks, beginning (mil. lb.)	370.4	293.0	238.2	350.7	403.8	406.9	412.4	404.0	393.3	376.0
Commercial disappearance (mil. lb.)	2,670.0	2,683.1	2,781.0	244.4	241.8	225.0	237.8	232.6	223.6	—
Other cheese										
Production (mil. lb.)	2,815.4	2,941.3	3,170.4	273.2	288.5	270.2	264.9	269.2	270.7	286.3
Stocks, beginning (mil. lb.)	89.7	104.7	93.2	111.1	106.9	103.8	107.7	108.7	102.0	103.9
Commercial disappearance (mil. lb.)	3,034.5	3,208.9	3,429.8	304.4	296.5	291.0	288.4	301.2	292.7	—
Nonfat dry milk										
Production (mil. lb.)	979.7	874.7	876.6	54.9	101.4	78.6	69.8	56.8	44.5	48.9
Stocks, beginning (mil. lb.)	177.2	53.1	49.5	121.2	287.0	328.8	342.8	349.7	337.5	302.6
Commercial disappearance (mil. lb.)	734.3	873.0	895.0	32.6	82.7	76.2	68.0	65.4	57.2	—
Frozen dessert										
Production (mil. gal.) 4/	1,248.0	1,214.0	1,162.9	88.4	114.7	124.9	128.4	118.1	98.4	92.0
	Annual			1990				1991		
	1988	1989	1990	I	II	III	IV	I	II P	III P
Milk production (mil. lb.) 1/	145,152	144,239	148,284	36,740	38,626	36,632	36,285	37,470	38,630	36,295
Milk per cow (lb.)	14,145	14,244	14,842	3,627	3,820	3,620	3,575	3,708	3,855	3,642
No. of milk cows (1,000)	10,282	10,126	10,127	10,128	10,111	10,119	10,151	10,104	10,020	9,967
Milk-feed price ratio 5/	1.68	1.65	1.72	1.83	1.89	1.74	1.67	1.49	1.47	1.59
Returns over concentrate 5/ costs (\$/cwt milk)	8.99	10.18	10.39	11.13	10.00	10.50	9.03	8.30	8.10	8.00

1/ Manufacturing grade milk. 2/ Prices paid f.o.b. Central States production area. 3/ Milk equivalent, fat basis. 4/ Hard ice cream, ice milk, & hard sherbet. 5/ Based on average milk price after adjustment for price support deductions. 6/ Includes estimates of butteroil exported through the Dairy Export Incentive Program (DEIP). 7/ Estimated. P = preliminary. — = not available.

Information contact: LaVerne T. Williams (202) 219-0770.

Table 15.—Wool

	Annual			1990			1991*		
	1988	1989	1990	II	III	IV	I	II	III
U.S. wool price, (cts./lb.) 1/	438	370	258	272	238	227	197	200	217
Imported wool price, (cts./lb.) 2/	372	354	287	312	281	270	235	199	194
U.S. mill consumption, scoured									
Apparel wool (1,000 lb.)	117,069	120,534	120,622	31,726	26,888	30,497	33,320	38,691	35,963
Carpet wool (1,000 lb.)	15,633	14,122	12,124	2,950	3,125	2,138	3,088	3,119	4,644

1/ Wool price delivered at U.S. mills, clean basis. Graded Territory 64's (20.60-22.04 microns) staple 2-3/4" & up. 2/ Wool price, Charleston, SC warehouse, clean basis, Australian 60/62's, type 64A (24 micron). Duty since 1982 has been 10.0 cents. — = not available.

Information contact: John Lawler (202) 219-0840.

Table 16.—Meat Animals

	Annual			1990		1991					
	1988	1989	1990	Nov	June	July	Aug	Sept	Oct	Nov	
Cattle on feed (7 States)											
Number on feed (1,000 head) 1/	8,411	8,045	8,378	8,729	8,585	7,847	7,348	7,009	7,158	7,943	
Placed on feed (1,000 head)	20,654	20,834	21,215	2,007	1,077	1,317	1,439	1,821	2,479	—	
Marketings (1,000 head)	19,918	19,422	19,238	1,512	1,701	1,724	1,711	1,598	1,615	—	
Other disappearance (1,000 head)	1,202	1,079	1,218	95	114	92	67	76	77	—	
Beef steer-corn price ratio, Omaha 2/	31.6	30.3	32.8	37.3	32.0	31.3	28.5	28.8	29.9	30.5	
Hog-corn price ratio, Omaha 2/	19.6	18.4	23.1	23.2	23.6	24.2	21.8	19.9	18.9	16.5	
Market prices (\$/cwt)											
Slaughter cattle											
Choice steers, Omaha 1,000-1,100 lb.	69.54	72.52	77.40	79.93	74.83	72.08	67.25	67.20	68.91	69.90	
Choice steers, Neb. Direct, 1,100-1,300 lb.	71.19	73.86	78.56	81.06	74.39	72.16	67.24	68.07	69.79	71.02	
Boning utility cows, Sioux Falls	47.21	48.90	53.60	46.76	54.19	52.41	50.08	49.77	47.83	49.93	
Feeder cattle											
Medium no. 1, Oklahoma City 600-700 lb.	84.72	86.66	92.15	93.56	97.30	95.81	90.06	89.74	88.90	86.60	
Slaughter hogs											
Barrows & gilts, 7-markets	43.39	44.03	54.45	49.70	54.55	55.22	50.78	48.53	43.18	37.82	
Feeder pigs											
S. Mo. 40-50 lb. (per head)	35.06	33.63	51.46	46.22	42.78	40.98	36.53	38.22	33.75	30.22	
Slaughter sheep & lambs											
Lambs, Choice, San Angelo	68.28	67.32	55.54	50.42	55.75	56.60	54.31	53.25	51.20	52.08	
Ewes, Good, San Angelo	38.88	38.58	35.21	33.83	33.38	34.63	31.06	29.63	28.80	30.75	
Feeder lambs											
Choice, San Angelo	90.89	79.85	82.95	57.83	49.69	51.81	53.38	52.63	61.70	62.76	
Wholesale meat prices, Midwest											
Boxed beef cut-out value	110.50	114.78	123.21	128.32	120.61	115.82	111.54	110.81	113.04	113.43	
Canner & curter cow beef	87.77	94.43	99.99	91.11	105.15	101.89	101.23	99.69	96.16	91.08	
Pork loins, 14-18 lb. 3/	97.49	101.09	117.52	98.94	123.49	121.73	117.54	105.85	100.87	88.83	
Pork bellies, 12-14 lb.	41.25	34.14	53.80	60.57	56.48	50.40	42.01	38.97	32.28	30.04	
Hams, skinned, 14-17 lb.	71.03	69.39	87.70	108.00	NQ	85.00	85.00	85.00	87.25	81.00	
All fresh beef retail price 4/	224.81	238.97	254.99	263.40	264.50	263.39	261.58	258.23	259.12	261.46	
Commercial slaughter (1,000 head)*											
Cattle	35,079	33,917	33,242	2,701	2,709	2,844	2,906	2,703	2,933	—	
Steers	17,346	16,639	16,587	1,302	1,445	1,515	1,543	1,386	1,465	—	
Heifers	10,753	10,408	10,090	787	813	863	893	852	882	—	
Cows	6,338	6,318	5,920	559	400	415	416	414	525	—	
Bulls & stags	644	657	644	53	51	51	55	61	61	—	
Calves	2,508	2,172	1,789	153	92	111	112	119	131	—	
Sheep & lambs	5,293	5,485	5,654	481	406	451	458	477	623	—	
Hogs	87,795	88,691	85,135	7,532	8,296	6,733	7,279	7,359	8,498	—	
Commercial production (mil. lb.)											
Beef	23,424	22,974	22,634	1,842	1,674	1,996	2,077	1,939	2,115	—	
Veal	387	344	316	28	20	22	22	24	27	—	
Lamb & mutton	329	341	357	30	25	29	27	29	32	—	
Pork	15,623	15,759	15,299	1,373	1,140	1,207	1,299	1,315	1,534	—	

	Annual			1990			1991			
	1988	1989	1990	II	III	IV	I	II	III	IV
Cattle on feed (13 States)										
Number on feed (1,000 head) 1/	10,114	9,688	9,943	10,063	8,761	9,092	10,977	10,869	9,428	8,540
Placed on feed (1,000 head)	24,423	24,489	24,948	5,088	6,333	7,486	5,692	4,890	5,364	—
Marketings (1,000 head)	23,459	22,940	22,581	6,988	5,741	5,254	5,338	5,869	5,968 6/	5,155
Other disappearance (1,000 head)	1,390	1,274	1,393	400	261	347	462	464	282	—
Hogs & pigs (10 States) 5/										
Inventory (1,000 head) 1/	42,675	43,210	42,200	40,190	42,630	44,120	42,900	41,990	44,470	46,950
Breeding (1,000 head) 1/	5,435	5,335	5,275	5,245	5,405	5,300	5,257	5,450	5,700	5,685
Market (1,000 head) 1/	37,240	37,875	36,925	34,945	37,225	38,820	37,643	36,540	38,770	41,265
Farrowings (1,000 head)	9,370	9,203	8,855	2,458	2,236	2,236	2,129	2,577	2,441 6/	2,433
Pig crop (1,000 head)	72,268	71,807	70,549	19,578	17,664	17,456	16,770	20,555	19,260	—

1/ Beginning of period. 2/ Bushels of corn equal in value to 100 pounds live weight. 3/ Prior to 1984, 8-14 lb.; 1984 & 1985, 14-17 lb.; beginning 1986, 14-18 lb. 4/ New series estimating the composite price of all beef grades & ground beef sold by retail stores. This new series is in addition to, but does not replace, the series for the retail price of Choice beef that appears in table 8. 5/ Quarters are Dec. of preceding year-Feb. (I), Mar.-May (II), June-Aug. (III), & Sept.-Nov. (IV). 6/ Intentions.
 *Classes estimated. May not add to NASS totals due to rounding. — = not available, NQ = no quotation.

Information contact: Polly Cochran (202) 219-0787.

Crops & Products

Table 17.—Supply & Utilization^{1,2}

	Area			Yield	Production	Total supply 4/	Feed and residual	Other domestic use	Exports	Total use	Ending stocks	Farm price 5/
	Set aside 3/	Planted	Harvested									
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
Wheat												
1986/87	21.0	72.0	60.7	34.4	2,091	4,017	401	796	999	2,196	1,821	2.42
1987/88	23.9	65.8	55.9	37.7	2,108	3,945	280	808	1,598	2,684	1,261	2.57
1988/89	22.5	65.5	53.2	34.1	1,812	3,096	146	828	1,419	2,394	702	3.72
1989/90*	9.6	76.6	62.2	32.7	2,037	2,762	139	853	1,233	2,225	536	3.72
1990/91*	7.6	77.2	69.3	39.5	2,736	3,309	489	886	1,068	2,444	866	2.61
1991/92*	16.2	69.9	57.7	34.3	1,981	2,886	350	897	1,225	2,472	414	2.85-3.05
Rice												
	Mil. acres		Lb./acre					Mil. cwt (rough equiv.)				\$/cwt
1986/87	1.48	2.38	2.38	5,651	133.4	213.3	—	6/ 77.7	64.2	161.9	51.4	3.75
1987/88	1.57	2.36	2.33	5,555	129.8	184.0	—	6/ 80.4	72.2	152.6	31.4	7.27
1988/89	1.09	2.93	2.90	5,514	159.9	195.0	—	6/ 82.3	85.9	168.2	26.7	6.83
1989/90*	1.18	2.73	2.69	5,749	154.5	185.6	—	6/ 82.1	77.2	159.3	26.3	7.35
1990/91*	1.02	2.89	2.81	5,507	154.9	186.0	—	6/ 90.5	70.9	161.5	24.6	6.60-6.80
1991/92*	0.56	2.87	2.83	5,616	159.0	188.7	—	6/ 92.8	68.0	160.8	27.9	6.75-7.75
Corn												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1986/87	14.3	76.6	68.9	119.4	8,226	12,267	4,701	1,192	1,492	7,395	4,882	1.50
1987/88	23.1	66.2	59.5	119.8	7,131	12,016	4,812	1,229	1,716	7,757	4,259	1.94
1988/89	20.6	67.7	56.3	84.6	4,929	9,191	3,981	1,251	2,028	7,260	1,930	2.54
1989/90*	10.8	72.2	64.7	116.3	7,525	9,458	4,455	1,290	2,369	8,113	1,344	2.38
1990/91*	10.7	74.2	67.0	118.6	7,933	9,281	4,709	1,325	1,727	7,761	1,621	2.28
1991/92*	7.3	75.9	68.7	108.9	7,488	9,009	4,850	1,350	1,576	7,775	1,234	2.20-2.60
Sorghum												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1986/87	2.9	16.3	13.9	67.7	939	1,490	536	12	198	746	743	1.37
1987/88	4.1	11.8	10.5	69.4	731	1,474	555	25	232	812	663	1.70
1988/89	3.9	10.3	9.0	63.8	677	1,239	488	22	310	800	440	2.27
1989/90*	3.3	12.6	11.1	65.4	615	1,055	517	15	304	835	220	2.10
1990/91*	3.3	10.5	9.1	62.9	671	791	401	14	233	648	143	2.12
1991/92*	2.3	11.0	9.7	59.4	678	722	390	15	200	605	117	2.15-2.55
Barley												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1986/87	2.0	13.0	12.0	50.8	609	942	288	174	134	606	336	1.61
1987/88	2.9	10.9	10.0	52.4	521	889	253	174	121	548	321	1.81
1988/89	2.8	9.8	7.6	38.0	290	622	166	180	79	425	196	2.80
1989/90*	2.3	9.1	8.3	48.8	404	614	190	179	84	453	161	2.42
1990/91*	2.9	8.2	7.5	56.1	422	598	199	184	80	462	135	2.14
1991/92*	2.1	8.9	8.4	55.2	464	620	215	175	85	475	145	2.05-2.15
Oats												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1986/87	0.5	14.7	6.8	56.3	385	601	385	83	—	468	133	1.21
1987/88	0.8	17.9	6.9	54.3	374	552	358	81	1	440	112	1.58
1988/89	0.3	13.9	5.5	39.3	218	393	194	100	1	294	98	2.61
1989/90*	0.4	12.1	6.9	54.3	374	538	265	115	1	381	157	1.49
1990/91*	0.2	10.4	5.9	60.1	358	585	294	120	1	414	171	1.14
1991/92*	0.5	8.6	4.8	50.6	243	479	245	125	1	371	108	1.10-1.20
Soybeans												
	Mil. acres		Bu./acre					Mil. bu.				\$/bu.
1986/87	0	60.4	56.3	33.3	1,943	2,479	7/ 106	1,179	757	2,042	436	4.78
1987/88	0	58.2	57.2	33.9	1,938	2,375	7/ 97	1,174	802	2,073	302	5.88
1988/89	0	58.8	57.4	27.0	1,549	1,855	7/ 88	1,058	527	1,873	182	7.42
1989/90*	0	60.8	59.5	32.3	1,924	2,109	7/ 101	1,148	823	1,870	239	5.69
1990/91*	0	57.8	56.6	34.0	1,826	2,187	7/ 94	1,187	557	1,838	329	5.76
1991/92*	0	59.8	58.6	33.5	1,962	2,296	7/ 96	1,235	650	1,681	315	5.25-5.75
Soybean oil												
								Mil. lbs.				¢/ Cts./lb.
1986/87	—	—	—	—	12,783	13,745	—	10,833	1,187	12,020	1,725	15.40
1987/88	—	—	—	—	12,074	14,895	—	10,830	1,873	12,803	2,092	22.87
1988/89	—	—	—	—	11,737	13,987	—	10,591	1,661	12,262	1,715	21.10
1989/90*	—	—	—	—	13,004	14,741	—	12,083	1,353	13,436	1,305	22.30
1990/91*	—	—	—	—	13,408	14,730	—	12,185	780	12,965	1,765	21.00
1991/92*	—	—	—	—	13,876	15,650	—	12,300	1,100	13,400	2,250	17.5-20.5
Soybean meal												
								1,000 tons				¢/ \$/ton
1986/87	—	—	—	—	27,758	27,870	—	20,387	7,343	27,730	240	183
1987/88	—	—	—	—	28,090	28,300	—	21,293	6,854	28,147	153	222
1988/89	—	—	—	—	24,943	25,100	—	19,857	5,270	24,927	173	233
1989/90*	—	—	—	—	27,719	27,900	—	22,556	5,024	27,582	318	174
1990/91*	—	—	—	—	28,325	28,688	—	23,257	6,124	28,381	285	170
1991/92*	—	—	—	—	29,285	29,576	—	23,275	6,000	29,275	300	165-185

See footnotes at end of table.

Table 17.—Supply & Utilization, continued

	Area			Yield	Production	Total supply 4/	Feed and resid- ual	Other domestic use	Ex- ports	Total use	Ending Stocks	Farm price 6/
	Set Aside 3/	Planted	Harves- ted									
	Mil. acres			Lb./acre			Mil. bales					
Cotton 10/												
1986/87	4.2	10.0	8.5	552	9.7	19.1	—	7.5	6.7	14.1	5.0	52.40
1987/88	4.0	10.4	10.0	706	14.8	19.8	—	7.6	6.6	14.2	5.8	54.30
1988/89	2.2	12.5	11.9	619	15.4	21.2	—	7.6	6.1	13.9	7.1	55.60
1989/90*	3.5	10.6	9.5	614	12.2	19.3	—	8.8	7.7	16.5	3.0	58.20
1990/91*	2.0	12.3	11.7	634	15.5	18.5	—	8.7	7.8	16.4	2.3	58.10
1991/92*	0.9	14.1	13.3	648	18.0	20.4	—	9.1	7.2	19.3	4.2 11/	

* December 11, 1991 Supply & Demand Estimates. 1/ Marketing year beginning June 1 for wheat, barley, & oats; August 1 for cotton & rice; September 1 for soybeans, corn, & sorghum; October 1 for soybean oil & soybean meal. 2/ Conversion factors: Hectare (ha.) = 2.471 acres, 1 metric ton = 2,204.622 pounds, 36.7437 bushels of wheat or soybeans, 39.3679 bushels of corn or sorghum, 45.9298 bushels of barley, 88.8944 bushels of oats, 22.046 cwt of rice, & 4.59 480-pound bales of cotton. 3/ Includes diversion, PIK, acreage reduction, 50-92, & 9-92 programs. Data for 1991/92 are preliminary. 4/ Includes imports. 5/ Marketing-year weighted average price received by farmers. Does not include an allowance for loans outstanding & Government purchases. 6/ Residual included in domestic use. 7/ Includes seed. 8/ Simple average of crude soybean oil, Decatur. 9/ Simple average of 44 percent, Decatur. 10/ Upland & extra long staple. Stocks estimates based on Census Bureau data, resulting in an unaccounted difference between supply & use estimates & changes in ending stocks. 11/ USDA is prohibited from publishing cotton price projections. — = not available or not applicable.

Information contact: Commodity Economics Division, Crop Branch (202) 219-0840.

Table 18.—Cash Prices, Selected U.S. Commodities

	Marketing year 1/				1990 Oct	1991				
	1986/87	1987/88	1988/89	1989/90		June	July	Aug	Sept	Oct
Wheat, No. 1 HRW, Kansas City (\$/bu.) 2/	2.72	2.96	4.17	4.22	2.81	2.99	2.91	3.10	3.31	3.84
Wheat, DNS, Minneapolis (\$/bu.) 3/	3.07	3.15	4.36	4.16	2.85	3.04	2.94	3.10	3.21	3.88
Rice, S.W. La. (\$/cwt) 4/	10.25	19.25	14.85	15.55	13.75	17.25	16.95	16.40	16.50	16.80
Corn, no. 2 yellow, 30 day, Chicago (\$/bu.)	1.64	2.14	2.68	2.52	2.24	2.43	2.40	2.52	2.48	2.50
Sorghum, no. 2 yellow, Kansas City (\$/cwt)	2.73	3.40	4.17	4.24	3.79	4.02	4.05	4.22	4.24	4.30
Barley, feed, Duluth (\$/bu.) 5/	1.44	1.78	2.32	2.20	2.11	2.02	1.89	1.92	2.08	2.18
Barley, malting, Minneapolis (\$/bu.)	1.89	2.04	4.11	3.20	2.30	2.26	2.14	2.14	2.21	2.38
U.S. Price, SLM, 1-1/16 in. (cts./lb.) 6/	53.2	63.1	57.7	59.8	70.5	79.1	71.3	66.4	62.4	58.3
Northern Europe prices index (cts./lb.) 7/	62.0	72.3	66.4	82.3	81.5	83.8	80.7	72.9	69.9	67.9
U.S. M 1-3/32 in. (cts./lb.) 8/	61.8	76.3	69.2	83.6	82.4	—	—	78.5	73.1	70.3
Soybeans, no. 1 yellow, 30 day, Chicago (\$/bu.)	5.03	6.67	7.41	5.86	6.09	6.65	5.39	5.65	6.90	5.88
Soybean oil, crude, Decatur (cts./lb.)	15.40	22.70	21.10	22.30	22.59	19.70	19.10	20.20	20.50	19.57
Soybean meal, 44% protein, Decatur (\$/ton)	162.70	221.90	233.50	173.75	172.50	171.10	169.70	177.00	191.00	183.00

1/ Beginning June 1 for wheat & barley; Aug. 1 for rice & cotton; Sept. 1 for corn, sorghum & soybeans; Oct. 1 for soybean oil & meal. 2/ Ordinary protein. 3/ 14% protein. 4/ Long grain, milled basis. 5/ Beginning Mar. 1987 reporting point changed from Minneapolis to Duluth. 6/ Average spot market. 7/ Liverpool Cottonlook (A) index; average of five lowest prices of 11 selected growths. 8/ Memphis territory growths. — = not available.

Information contact: Joy Harwood (202) 219-0840.

Table 19.—Farm Programs, Price Supports, Participation & Payment Rates

	Target price	Basic loan rate	Findley or announced loan rate 1/	Payment rates			Effective base acres 2/	Program 3/	Participation rate 4/
				Paid land diversion					
				Deficiency	Mandatory	Optional			
				\$/bu.			Mil. acres	Percent of base	Percent of base
Wheat									
1986/87 5/	4.38	3.00	2.40	1.98	1.10	2.00	91.6	22.5/2.5/5-10	85
1987/88	4.38	2.85	2.28	1.81	—	—	87.6	27.5/0/0	88
1988/89	4.23	2.78	2.21	0.69	—	—	84.8	27.5/0/0	86
1989/90	4.10	2.58	2.08	0.32	—	—	82.3	10/0/0	78
1990/91 6/	4.00	2.44	1.95	1.28	—	—	80.5	7/ 5/0/0	83
1991/92	4.00	2.52	2.04	1.35	—	—	79.3	15/0/0	85
1992/93	4.00	2.58	2.21	—	—	—	—	6/0/0	—
Rice				\$/cwt					
1986/86	11.90	8.00	8/ 3.16	3.90	3.50	—	4.2	20/15/0	90
1986/87 5/	11.90	7.20	8/ 3.94	4.70	—	—	4.2	35/0/0	94
1987/88	11.66	6.84	8/ 5.79	4.82	—	—	4.2	35/0/0	96
1988/89	11.15	6.63	8/ 6.21	4.31	—	—	4.2	25/0/0	94
1989/90	10.80	6.50	8/ 5.71	3.68	—	—	4.2	25/0/0	95
1990/91 6/	10.71	6.60	8/ 5.08	4.21	—	—	4.2	20/0/0	94
1991/92	10.71	6.60	—	3.76	—	—	4.2	5/0/0	95
Corn				\$/bu.					
1986/87 5/	3.03	2.40	1.92	1.11	—	—	81.7	17.5/2.5/0	88
1987/88	3.03	2.28	1.82	1.09	0.73	2.00	81.5	20/0/15	91
1988/89	2.93	2.21	1.77	0.38	—	1.75	92.9	20/0/10	87
1989/90	2.84	2.06	1.65	0.58	—	—	82.7	10/0/0	80
1990/91 6/	2.76	1.96	1.57	0.53	—	—	82.6	10/0/0	77
1991/92	2.75	1.89	1.62	0.58	—	—	82.9	7.5/0/0	77
1992/93	2.75	2.01	1.72	—	—	—	—	5/0/0	—
Sorghum				\$/bu.					
1986/87 5/	2.88	2.28	1.82	1.08	0.65	—	19.0	9/ 17.5/2.5/0	74
1987/88	2.88	2.17	1.74	1.14	—	1.60	17.4	20/0/15	85
1988/89	2.78	2.10	1.68	0.48	—	1.65	18.8	20/0/10	82
1989/90	2.70	1.98	1.57	0.66	—	—	16.2	10/0/0	71
1990/91 6/	2.61	1.86	1.49	0.58	—	—	15.4	10/0/0	70
1991/92	2.61	1.80	1.54	0.56	—	—	13.5	7.5/0/0	77
1992/93	2.61	1.91	1.63	—	—	—	—	5/0/0	—
Barley				\$/bu.					
1986/87 5/	2.60	1.95	1.56	0.99	0.57	—	12.4	9/ 17.5/2.5/0	72
1987/88	2.60	1.88	1.49	0.79	—	1.60	12.5	20/0/15	85
1988/89	2.51	1.80	1.44	0.00	—	1.40	12.4	20/0/10	79
1989/90	2.43	1.68	1.34	0.00	—	—	12.3	10/0/0	87
1990/91 6/	2.38	1.60	1.28	0.22	—	—	11.9	10/0/0	68
1991/92	2.36	1.54	1.32	0.62	—	—	11.5	7.5/0/0	76
1992/93	2.36	1.64	1.40	—	—	—	—	5/0/0	—
Oats				\$/bu.					
1986/87 5/	1.80	1.23	0.99	0.39	0.36	—	9.2	9/ 17.5/2.5/0	38
1987/88	1.80	1.17	0.94	0.20	—	0.80	8.4	20/0/15	45
1988/89	1.55	1.14	0.90	0.00	—	—	7.9	5/0/0	30
1989/90	1.50	1.06	0.85	0.00	—	—	7.6	5/0/0	18
1990/91 6/	1.45	1.01	0.81	0.33	—	—	7.5	5/0/0	09
1991/92	1.45	0.97	0.83	0.35	—	—	7.3	0/0/0	38
1992/93	1.45	1.03	0.88	—	—	—	—	0/0/0	—
Soybeans 10/				\$/bu.					
1986/87 5/	—	—	4.77	—	—	—	—	—	—
1987/88	—	—	4.77	—	—	—	—	—	—
1988/89	—	—	4.77	—	—	—	—	—	—
1989/90	—	—	4.53	—	—	—	—	11/ 10/25	—
1990/91 6/	—	—	4.50	—	—	—	—	11/ 0/25	—
1991/92	—	—	5.02	—	—	—	—	11/ 0/25	—
1992/93	—	—	5.02	—	—	—	—	11/ 0/25	—
Upland cotton				Cts./lb.					
1986/87 5/	81.0	55.00	12/ 44.00	26.00	—	—	15.5	25/0/0	92
1987/88	79.4	52.25	13/ 60.00	17.3	—	—	14.5	25/0/0	93
1988/89	75.9	51.80	13/ 51.89	19.4	—	—	14.6	12.5/0/0	89
1989/90	73.4	50.00	13/ 65.05	13.1	—	—	14.8	25/0/0	89
1990/91 6/	72.9	50.27	13/ 53.00	7.3	—	—	14.4	12.5/0/0	86
1991/92 14/	72.9	50.77	13/ —	10.0	—	—	14.6	5/0/0	84
1992/93	72.9	52.35	13/ —	—	—	—	—	10/0/0	—

1/ There are no Findley loan rates for rice or cotton. See footnotes 8/, 12/, and 13/. 2/ National effective crop acreage base as determined by ASCS. Net of CRP. 3/ Program requirements for participating producers (mandatory acreage reduction program/mandatory paid land diversion/optional paid land diversion). Acres idled must be devoted to a conserving use to receive program benefits. 4/ Percentage of effective base acres enrolled in acreage reduction programs. 5/ Payments and loans received in cash were reduced by 4.3 percent in 1986/87 due to Gramm-Rudman-Hollings. 6/ Payments and loans were reduced by 1.4 percent in 1990/91 due to Gramm-Rudman-Hollings. Budget Reconciliation Act reductions to deficiency payments rates were also in effect in that year. Data do not include these reductions. 7/ Under 1990 modified contracts, participating producers plant up to 105 percent of their wheat base acres. For every acre planted above 95 percent of base, the acreage used to compute deficiency payments was cut by 1 acre. 8/ A marketing loan has been in effect for rice since 1985/86. Loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly). However, loans cannot be repaid at less than a specified fraction of the loan rate. Data refer to annual average adjusted world prices. 9/ The sorghum, oats, and barley programs are the same as for corn except as indicated. 10/ There are no target prices, base acres, acreage reduction programs, or deficiency payment rates for soybeans. 11/ Nominal percentage of program crop base acres permitted to shift into soybeans without loss of base. 12/ A marketing loan has been in effect for cotton since 1986/87. The loan repayment rate was fixed at 80 percent of the loan rate in 1986/87 (Plan A). 13/ In 1987/88 and after, loans may be repaid at the lower of: a) the loan rate or b) the adjusted world market price (announced weekly; Plan B). Starting in 1991/92, loans cannot be repaid at less than 70 percent of the loan rate. Data refer to annual average adjusted world prices. 14/ A marketing certificate program was implemented on Aug. 1, 1991. — = not available.

*Note: For the winter wheat option, the rate is 61.25.

Information contact: Joy Harwood (202) 219-0840.

Table 20.—Fruit

	1982	1983	1984	1985	1986	1987	1988	1989	1990 P
Citrus 1/									
Production (1,000 ton)	12,139	13,682	10,832	10,525	11,058	11,993	12,761	13,188	11,324
Per capita consumpt. (lbs.) 2/	24.8	29.5	24.0	22.8	26.0	25.8	28.4	25.4	22.4
Noncitrus 3/									
Production (1,000 tons)	14,658	14,168	14,301	14,191	13,874	16,011	15,893	16,321	15,572
Per capita consumpt. (lbs.) 2/	62.8	63.6	67.7	66.7	69.8	75.4	72.7	74.3	69.8
	1991								
	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
F.o.b. shipping point prices									
Apples (\$/carton) 4/	14.00	14.00	14.00	14.00	14.00	14.00	14.00	19.20	14.00
Pears (\$/box) 5/	13.85	13.48	13.74	15.12	18.90	—	—	13.00	13.00
Grower prices									
Oranges (\$/box) 6/	5.98	7.41	7.37	7.95	21.35	19.48	20.81	21.97	11.09
Grapefruit (\$/box) 6/	4.50	5.43	5.10	4.91	5.44	4.82	2.86	1.38	6.24
Stocks, ending									
Fresh apples (mil. lbs.)	2,100.7	1,569.8	1,080.9	690.7	385.8	163.0	17.7	2,723.6	5,133.7
Fresh pears (mil. lbs.)	145.4	95.0	50.8	14.7	—	12.8	137.5	456.3	420.8
Frozen fruits (mil. lbs.)	679.6	635.2	566.7	549.8	590.6	782.8	833.2	871.6	1,027.9
Frozen orange juice (mil. lbs.)	1,199.5	1,236.7	1,363.2	1,304.7	1,110.6	967.7	876.9	765.2	584.2

1/ 1990 indicated 1989/90 season. 2/ Fresh per capita consumption. 3/ Calendar year. 4/ Red delicious, Washington, extra fancy, carton tray pack, 125's. 5/ D'Anjou, Washington, standard box wrapped, U.S. no. 1, 135's. 6/ U.S. equivalent on-tree returns. P = preliminary. — = not available.

Information contact: Wynne Napper (202) 219-0884.

Table 21.—Vegetables

	Calendar year									
	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990
Production										
Total vegetables (1,000 cwt)	392,343	430,795	403,509	456,334	453,030	448,629	478,381	468,779	542,437	561,768
Fresh (1,000 cwt) 1/ 3/	183,456	193,451	185,782	201,817	203,549	203,185	220,539	228,397	239,281	239,114
Processed (tons) 2/ 3/	10,444,330	11,867,170	10,886,350	12,725,880	12,474,040	12,273,200	12,892,100	12,019,110	15,157,790	16,132,680
Mushrooms (1,000 lbs.) 4/	517,146	490,826	561,531	595,661	587,956	614,383	631,819	667,759	714,992	749,488
Potatoes (1,000 cwt)	340,623	355,131	333,726	362,039	406,609	361,743	389,320	356,438	370,444	402,110
Sweetpotatoes (1,000 cwt)	12,799	14,833	12,083	12,902	14,573	12,368	11,611	10,945	11,358	12,594
Dry edible beans (1,000 cwt)	32,751	25,563	15,520	21,070	22,176	22,886	26,031	19,253	23,729	32,429
	1991									
	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct
Shipments										
Fresh (1,000 cwt) 5/	23,352	19,405	19,215	20,661	30,842	26,747	29,105	17,211	15,711	20,930
Potatoes (1,000 cwt)	14,681	11,322	12,337	14,497	15,695	10,395	10,720	8,796	9,641	13,069
Sweetpotatoes (1,000 cwt)	399	400	488	283	291	168	151	93	220	403

1/ Includes fresh production of asparagus, broccoli, carrots, cauliflower, celery, sweet corn, lettuce, honeydews, onions, & tomatoes. 2/ Includes processing production of snap beans, sweet corn, green peas, tomatoes, cucumbers (for pickles), asparagus, broccoli, carrots, & cauliflower. 3/ Asparagus & cucumber estimates were not available for 1982 & 1983. 4/ Fresh & processing agaricus mushrooms only. Excludes specialty varieties. Crop year July 1 – June 30. 5/ Includes snap beans, broccoli, cabbage, carrots, cauliflower, celery, sweet corn, cucumbers, eggplant, lettuce, onions, bell peppers, squash, tomatoes, cantaloupes, honeydews, & watermelons.

Information contacts: Gary Lucier or Cathy Greene (202) 219-0884.

Table 22.—Other Commodities

	Annual					1990		1991		
	1986	1987	1988	1989	1990	July-Sept	Oct-Dec	Jan-Mar	Apr-June	July-Sept
Sugar										
Production 1/	6,267	7,309	7,087	6,841	6,335	652	3,435	2,206	628	648
Deliveries 1/	7,786	8,167	8,188	8,340	8,661	2,322	2,311	2,019	2,103	2,340
Stocks, ending 1/	3,225	3,195	3,132	2,948	2,642	1,210	2,729	3,630	2,487	1,513
Coffee										
Composite green price N.Y. (cts/lb.)	185.18	109.14	115.59	95.17	76.93	79.10	76.85	74.94	72.13	68.18
Imports, green bean equiv. (mil. lbs.) 2/	2,596	2,638	2,072	2,630	2,714	630	616	748	563	562
	Annual					1991				
	1988	1989	1990	Apr	Nov	Dec	Jan	Feb	Mar	Apr
Tobacco										
Prices at auctions 3/										
Flue-cured (\$/lb.)	1.61	—	—	—	1.65	—	—	—	—	—
Burley (\$/lb.)	1.61	—	1.71	1.69.8	1.75	1.75	1.78	177.0	—	187.0
Domestic consumption 4/										
Cigarettes (bil.)	562.5	540.1	523.1	45.3	45.6	34.1	34.5	39.4	47.1	40.1
Large cigars (mil.)	2,531	2,487.6	2,343.4	174.2	209.6	157.9	152.1	144.9	162.5	175.4

1/ 1,000 short tons, raw value. Quarterly data shown at end of each quarter. 2/ Net imports of green & processed coffee. 3/ Crop year July-June for flue-cured. Oct-Sept. for burley. 4/ Taxable removals. — = not available.

Information contacts: sugar, Peter Buzzanell (202) 219-0886, coffee, Fred Gray (202) 219-0888, tobacco, Verner Grise (202) 219-0890.

World Agriculture

Table 23.—World Supply & Utilization of Major Crops, Livestock & Products

	1985/86	1986/87	1987/88	1988/89	1989/90	1990/91 P	1991/92 F
	Million units						
Wheat							
Area (hectares)	230.2	228.2	219.9	217.9	226.4	232.1	223.3
Production (metric tons)	501.0	531.1	502.4	501.3	537.9	593.1	545.4
Exports (metric tons) 1/	84.8	91.3	106.1	97.2	96.1	93.5	106.4
Consumption (metric tons) 2/	496.6	523.1	531.2	531.8	534.4	572.2	558.6
Ending stocks (metric tons) 3/	169.7	177.6	148.8	118.3	121.8	142.8	129.6
Coarse grains							
Area (hectares)	342.0	337.1	324.5	326.1	323.0	317.9	321.7
Production (metric tons)	844.0	833.0	795.2	731.3	802.7	833.4	803.8
Exports (metric tons) 1/	83.2	83.7	82.5	94.2	100.0	85.5	83.3
Consumption (metric tons) 2/	779.7	807.2	815.6	795.6	828.1	821.7	809.8
Ending stocks (metric tons) 3/	208.2	234.0	213.6	149.3	123.8	135.5	129.4
Rice, milled							
Area (hectares)	145.0	145.4	141.7	145.6	146.4	147.1	145.9
Production (metric tons)	319.1	319.0	314.5	331.0	344.5	352.2	344.9
Exports (metric tons) 4/	12.6	12.9	11.9	15.1	12.0	12.5	13.1
Consumption (metric tons) 2/	319.7	323.0	320.2	328.7	337.9	347.9	346.6
Ending stocks (metric tons) 3/	55.4	51.4	45.6	47.9	54.5	58.9	57.2
Total grains							
Area (hectares)	717.2	710.7	686.1	689.6	695.8	697.1	690.9
Production (metric tons)	1,664.1	1,683.1	1,612.1	1,563.6	1,685.1	1,778.7	1,694.1
Exports (metric tons) 1/	180.6	187.9	200.5	206.5	208.1	191.6	202.8
Consumption (metric tons) 2/	1,596.0	1,653.3	1,667.0	1,656.1	1,700.4	1,741.8	1,715.0
Ending stocks (metric tons) 3/	433.3	463.0	408.0	315.5	300.1	337.2	316.1
Oilseeds							
Crush (metric tons)	155.1	161.8	168.5	166.4	173.2	179.0	180.6
Production (metric tons)	196.2	194.9	210.6	204.1	214.1	217.6	222.5
Exports (metric tons)	34.5	37.7	39.5	32.0	35.9	34.0	35.6
Ending stocks (metric tons)	26.8	23.3	24.0	22.2	23.3	22.1	23.3
Meals							
Production (metric tons)	105.0	110.7	115.4	112.2	117.9	120.9	122.2
Exports (metric tons)	34.4	36.7	35.8	37.8	38.8	38.7	38.8
Oils							
Production (metric tons)	49.4	50.4	53.3	53.9	57.6	58.9	60.5
Exports (metric tons)	16.4	16.9	17.5	18.2	20.0	19.9	20.0
Cotton							
Area (hectares)	31.7	29.5	31.0	33.7	31.6	33.0	34.1
Production (bales)	80.4	70.7	61.0	84.6	80.0	87.1	90.5
Exports (bales)	20.3	26.0	23.2	25.9	24.0	23.2	23.3
Consumption (bales)	76.9	82.8	64.1	85.2	86.6	85.3	86.5
Ending stocks (bales)	48.5	35.9	32.9	32.1	26.4	28.1	31.9
	1986	1987	1988	1989	1990	1991 P	1992 F
Red meat							
Production (metric tons)	109.8	112.7	116.4	117.8	119.5	119.2	121.6
Consumption (metric tons)	108.6	110.8	114.4	116.4	117.6	117.6	120.2
Exports (metric tons) 1/	6.6	6.7	7.1	7.3	7.2	7.2	7.3
Poultry 5/							
Production (metric tons)	29.4	31.4	33.1	34.3	36.3	37.7	39.1
Consumption (metric tons)	29.0	31.0	32.7	33.9	35.8	37.2	38.5
Exports (metric tons) 1/	1.3	1.5	1.7	1.8	2.1	2.2	2.2
Dairy							
Milk production (metric tons)	425.9	425.7	429.0	434.9	442.6	426.8	425.5

1/ Excludes intra-EC trade. 2/ Where stocks data not available (excluding USSR), consumption includes stock changes. 3/ Stocks data are based on differing marketing years & do not represent levels at a given date. Data not available for all countries; includes estimated change in USSR grain stocks but not absolute level. 4/ Calendar year data. 1986 data correspond with 1985/86, etc. 5/ Poultry excludes the Peoples Republic of China before 1986. P = preliminary, F = forecast.

Information contacts: Crops, Carol Whitton (202) 219-0824; red meat & poultry, Linda Bailey (202) 219-1285; dairy, Sara Short (202) 219-0770.

U.S. Agricultural Trade

Table 24.—Prices of Principal U.S. Agricultural Trade Products

	Annual			1990	1991					
	1988	1989	1990	Oct	May	June	July	Aug	Sept	Oct
Export commodities										
Wheat, f.o.b. vessel, Gulf ports (\$/bu.)	3.97	4.65	3.72	3.16	3.35	3.29	3.22	3.44	3.83	4.00
Corn, f.o.b. vessel, Gulf ports (\$/bu.)	2.73	2.85	2.79	2.55	2.70	2.66	2.69	2.61	2.77	2.79
Grain sorghum, f.o.b. vessel, Gulf ports (\$/bu.)	2.52	2.70	2.65	2.50	2.62	2.51	2.56	2.69	2.71	2.74
Soybeans, f.o.b. vessel, Gulf ports (\$/bu.)	7.81	7.06	6.24	6.33	6.09	6.03	5.79	6.07	6.26	5.99
Soybean oil, Decatur (cts./lb.)	23.52	20.21	22.75	22.09	20.29	19.55	18.87	20.09	20.02	19.06
Soybean meal, Decatur (\$/ton)	234.75	216.59	169.37	172.49	171.14	171.43	169.70	181.32	192.23	181.83
Cotton, 8-market avg. spot (cts./lb.)	57.25	63.78	71.25	70.54	83.94	79.05	71.33	66.44	62.54	58.28
Tobacco, avg. price at auction (cts./lb.)	147.82	161.74	166.06	169.17	171.12	171.12	170.66	165.49	178.48	178.02
Rice, f.o.b. mill, Houston (\$/cwt)	19.60	15.88	15.52	14.50	16.00	17.00	17.00	17.00	17.00	16.50
Inedible tallow, Chicago (cts./lb.)	16.64	14.71	13.54	13.42	12.25	12.36	12.96	14.00	13.50	13.88
Import commodities										
Coffee, N.Y. spot (¢/lb.)	1.21	1.04	0.81	0.85	0.76	0.71	0.68	0.66	0.66	0.61
Rubber, N.Y. spot (cts./lb.)	59.20	50.65	46.28	46.50	45.16	45.26	44.59	44.45	44.45	44.54
Cocoa beans, N.Y. (\$/lb.)	0.69	0.55	0.55	0.57	0.47	0.45	0.45	0.49	0.56	0.58

Information contact: Mary Teymourian (202) 219-0824.

Table 25.—Indexes of Real Trade-Weighted Dollar Exchange Rates ^{1/}

	1991										
	Jan	Feb	Mar	Apr	May	June P	July P	Aug P	Sept P	Oct P	Nov P
	1985 = 100										
Total U.S. trade ^{2/}	61.2	60.0	64.1	66.6	67.1	69.4	69.3	68.2	66.6	66.0	65.9
Agricultural trade											
U.S. markets	75.8	75.0	78.4	79.4	79.7	80.9	80.6	79.8	78.4	78.1	77.9
U.S. competitors	75.3	75.1	78.4	77.1	77.4	77.9	77.7	76.8	75.9	76.2	76.3
Wheat											
U.S. markets	94.2	93.7	97.5	97.7	98.6	99.5	99.8	98.8	96.9	97.1	97.1
U.S. competitors	69.3	70.2	70.9	71.4	71.3	71.9	71.6	71.0	70.3	70.1	70.0
Soybeans											
U.S. markets	64.1	62.9	66.3	68.1	68.4	70.2	69.8	68.8	67.3	66.7	66.5
U.S. competitors	59.2	61.5	57.9	57.6	57.2	58.0	54.6	54.1	53.9	53.8	53.8
Corn											
U.S. markets	70.0	68.8	72.6	73.3	73.5	74.6	74.1	73.6	72.2	71.3	70.9
U.S. competitors	61.3	63.8	63.9	65.0	64.9	65.7	65.1	64.6	64.0	64.1	64.2
Cotton											
U.S. markets	73.1	72.1	74.2	74.7	74.9	75.9	75.7	75.2	74.2	73.7	73.5
U.S. competitors	64.2	63.6	60.3	60.3	60.4	60.8	60.6	60.2	60.8	60.9	60.3

^{1/} Real indexes adjust nominal exchange rates for differences in rates of inflation, to avoid the distortion caused by high-inflation countries. A higher value means the dollar has appreciated. See the October 1988 issue of Agricultural Outlook for a discussion of the calculations and the weights used. ^{2/} Federal Reserve Board Index of trade-weighted value of the U.S. dollar against 10 major currencies. Weights are based on relative importance in world financial markets. P = preliminary.

Information contact: Tim Baxter, David Stallings (202) 219-0718.

Table 26.—Trade Balance

	Fiscal year ^{1/}									Sept
	1984	1985	1986	1987	1988	1989	1990	1991	1992 F	1991
	\$ million									
Exports										
Agricultural	38,027	31,201	26,312	27,876	35,316	39,811	40,271	37,613	39,000	2,854
Nonagricultural	170,014	179,236	179,291	202,911	258,656	301,248	326,008	356,754	—	29,922
Total ^{2/}	208,041	210,437	205,603	230,787	293,972	340,859	366,279	394,367	—	32,776
Imports										
Agricultural	18,916	19,740	20,884	20,650	21,014	21,476	22,560	22,588	22,000	1,802
Nonagricultural	297,736	313,722	342,846	367,374	409,138	441,075	458,101	463,720	—	39,314
Total ^{3/}	316,652	333,462	363,730	388,024	430,152	462,551	480,661	486,308	—	41,116
Trade balance										
Agricultural	19,111	11,461	5,428	7,226	14,302	18,135	17,711	15,025	17,000	1,052
Nonagricultural	-127,722	-134,486	-183,556	-164,463	-150,482	-139,827	-132,093	-106,966	—	-9,392
Total	-108,611	-123,025	-158,127	-157,237	-136,180	-121,692	-114,382	-91,941	—	-8,340

^{1/} Fiscal years begin October 1 & end September 30. Fiscal year 1990 began Oct. 1, 1989 & ended Sept. 30, 1990. ^{2/} Domestic exports including Department of Defense shipments (F.A.S. value). ^{3/} Imports for consumption (customs value). F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 27.—U.S. Agricultural Exports & Imports

	Fiscal year*				Sept	Fiscal year*				Sept
	1989	1990	1991	1992 F	1991	1989	1990	1991	1992 F	1991
	1,000 units					\$ million				
EXPORTS										
Animals, live (no.) 1/	757	685	1,235	—	127	475	381	548	—	57
Meats & preps., excl. poultry (mt)	869	873	937	2/ 800	79	2,355	2,457	2,774	—	226
Dairy products (mt) 1/	192	105	43	—	7	475	358	293	500	32
Poultry meats (mt)	418	563	628	700	50	507	679	737	—	63
Fats, oils, & greases (mt)	1,377	1,265	1,169	1,100	114	531	459	418	—	40
Hides & skins incl. furskins	—	—	—	—	—	1,713	1,844	1,457	—	104
Cattle hides, whole (no.) 1/	26,260	24,240	21,704	—	1,824	1,360	1,436	1,162	—	89
Mink pelts (no.) 1/	3,073	5,128	3,941	—	91	91	118	74	—	3
Grains & feeds (mt)	114,709	112,925	94,868	—	7,837	16,830	15,698	12,205	3/ 12,800	1,036
Wheat (mt)	37,660	28,068	26,692	29,000	2,502	6,010	4,212	2,856	4/ 3,500	280
Wheat flour (mt)	1,178	851	1,076	1,100	78	255	198	202	—	16
Rice (mt)	3,041	2,491	2,401	2,300	178	955	830	749	800	63
Feed grains, incl. products (mt)	60,956	69,364	52,340	46,900	4,005	7,376	8,094	5,789	5,300	448
Feeds & fodders (mt)	11,086	11,153	11,254	5/ 11,500	943	1,849	1,828	1,913	—	187
Other grain products (mt)	790	979	1,105	—	131	385	535	696	—	73
Fruits, nuts, & preps. (mt)	2,555	2,873	2,849	—	235	2,394	2,789	3,038	—	272
Fruit juices incl.										
froz. (1,000 hectoliters) 1/	4,998	5,975	6,310	—	529	265	328	338	—	27
Vegetables & preps. (mt)	1,666	2,243	2,589	—	153	1,542	2,079	2,597	—	181
Tobacco, unmanufactured (mt)	209	218	239	200	10	1,249	1,359	1,533	1,600	61
Cotton, excl. linters (mt)	1,441	1,666	1,565	1,600	38	2,040	2,704	2,605	2,500	60
Seeds (mt)	465	658	514	—	106	499	573	616	700	63
Sugar, cane or beet (mt)	368	447	589	—	54	134	187	219	—	19
Oilseeds & products (mt)	21,052	23,743	21,991	—	1,471	6,629	6,099	5,609	6,300	386
Oilseeds (mt)	14,592	17,669	15,658	—	777	4,363	4,239	3,816	—	192
Soybeans (mt)	14,093	17,229	15,139	17,700	730	4,085	3,942	3,464	3,900	164
Protein meal (mt)	4,963	4,778	5,275	—	581	1,358	1,032	1,069	—	123
Vegetable oils (mt)	1,498	1,296	1,059	—	113	908	829	725	—	72
Essential oils (mt)	13	14	13	—	1	171	182	183	—	13
Other	322	91	92	—	8	1,802	2,115	2,441	—	214
Total	145,678	147,580	128,086	130,500	10,161	39,611	40,271	37,613	39,000	2,854
IMPORTS										
Animals, live (no.) 1/	2,485	2,938	3,168	—	214	740	1,053	1,131	1,100	70
Meats & preps., excl. poultry (mt)	1,091	1,142	1,191	—	100	2,432	2,848	3,016	—	249
Beef & veal (mt)	668	754	811	722	71	1,625	1,842	2,024	1,800	176
Pork (mt)	371	340	322	230	24	778	888	866	800	62
Dairy products (mt) 1/	211	254	231	—	20	834	951	807	800	66
Poultry & products 1/	—	—	—	—	—	130	129	119	—	12
Fats, oils, & greases (mt)	14	19	33	—	4	14	15	19	—	2
Hides & skins, incl. furskins 1/	—	—	—	—	—	241	182	153	—	11
Wool, unmanufactured (mt)	62	47	50	—	2	319	187	175	—	7
Grains & feeds (mt)	3,467	3,481	4,163	4,650	289	1,139	1,181	1,271	1,200	110
Fruits, nuts, & preps., excl. juices (mt)	5,035	5,331	5,648	5,420	395	2,269	2,486	2,740	—	183
Bananas & plantains (mt)	3,039	3,238	3,397	3,400	304	851	928	992	1,000	92
Fruit juices (1,000 hectoliters) 1/	27,747	33,933	27,948	32,000	2,414	792	1,002	737	—	65
Vegetables & preps. (mt)	2,217	2,242	2,179	—	106	1,959	2,264	2,185	2,100	127
Tobacco, unmanufactured (mt)	171	193	215	220	23	521	588	698	700	87
Cotton, unmanufactured (mt)	13	30	18	—	2	8	20	16	—	2
Seeds (mt)	158	171	169	170	8	187	164	173	200	10
Nursery stock & cut flowers 1/	—	—	—	—	—	466	519	538	—	51
Sugar, cane or beet (mt)	1,657	1,769	1,785	—	304	620	734	717	—	123
Oilseeds & products (mt)	1,917	2,016	2,077	—	178	946	964	959	1,000	77
Oilseeds (mt)	424	534	445	—	28	159	206	151	—	9
Protein meal (mt)	359	310	412	—	48	65	48	57	—	6
Vegetable oils (mt)	1,133	1,171	1,220	—	102	721	710	750	—	61
Beverages excl. fruit juices (1,000 hectoliters) 1/	13,987	13,543	12,987	—	1,013	1,815	1,867	1,858	—	145
Coffee, tea, cocoa, spices	1,867	2,202	2,025	2,755	160	3,896	3,465	3,280	—	244
Coffee, incl. products (mt)	1,084	1,290	1,116	1,150	88	2,467	1,997	1,831	1,800	129
Cocoa beans & products (mt)	564	698	680	690	53	969	1,042	1,005	1,000	77
Rubber & allied gums (mt)	927	840	792	790	67	1,051	712	664	700	56
Other	—	—	—	—	—	1,097	1,229	1,333	—	108
Total	—	—	—	—	—	21,476	22,560	22,586	22,000	1,802

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1991 began Oct. 1, 1990 & ended Sept. 30, 1991. 1/ Not included in total volume and also other dairy products for 1989 & 1990. 2/ Forecasts for footnoted items 2/-6/ are based on slightly different groups of commodities. Fiscal 1990 exports of categories used in the 1991 forecasts were 2/ 678,000 m. tons. 3/ 16,014 million. 4/ 4,426 million i.e. includes flour. 5/ 11,065 million m. tons. F = forecast. — = not available.

Information contact: Stephen MacDonald (202) 219-0822.

Table 28.—U.S. Agricultural Exports by Region

Region & country	Fiscal year*				Sept	Change from year* earlier				Sept
	1989	1990	1991	1992 F	1991	1989	1990	1991	1992 F	1991
	\$ million.					Percent				
WESTERN EUROPE	7,049	7,371	7,315	7,400	489	-12	5	-1	1	17
European Community (EC-12)	6,539	6,678	6,779	6,900	424	-13	5	-1	1	19
Belgium-Luxembourg	431	428	464	—	32	0	-1	9	—	83
France	474	489	571	—	43	-16	-1	22	—	32
Germany, Fed. Rep.	918	1,096	1,135	—	82	-28	19	4	—	-10
Italy	609	763	677	—	51	-15	25	-11	—	14
Netherlands	1,847	1,836	1,562	—	85	-12	-11	-5	—	37
United Kingdom	736	781	884	—	83	-10	3	18	—	-1
Portugal	307	338	251	—	9	-10	10	-28	—	354
Spain, incl. Canary Islands	850	978	855	—	48	0	15	-12	—	52
Other Western Europe	510	493	536	500	45	-2	-3	9	0	8
Switzerland	186	171	194	—	11	-14	3	13	—	48
EASTERN EUROPE	422	533	308	200	18	-25	28	-43	-33	-60
German Dem. Rep.	72	58	0	—	0	7	-20	-100	—	0
Poland	45	101	46	—	2	-73	124	-54	—	-63
Yugoslavia	78	129	74	—	1	-27	69	-43	—	-96
Romania	82	210	82	—	0	-33	239	-61	—	-84
USSR	3,299	3,008	1,758	1,900	195	70	-9	-42	8	2,081
ASIA	18,874	18,182	16,097	17,200	1,201	17	-3	-11	7	-8
West Asia (Mideast)	2,273	1,998	1,430	1,700	158	19	-12	-28	21	43
Turkey	238	280	224	—	21	98	9	-14	—	18
Iraq	791	497	0	0	0	8	-37	-100	0	0
Israel, incl. Gaza & W. Bank	331	285	287	—	18	-1	-14	1	—	311
Saudi Arabia	482	502	538	600	74	4	4	7	20	51
South Asia	1,181	723	375	—	80	44	-38	-48	—	-16
Bangladesh	213	120	87	—	19	99	-44	-44	—	-14
India	243	116	95	—	7	-31	-52	-18	—	-28
Pakistan	599	391	144	200	23	117	-35	-63	-75	-24
China	1,498	908	668	900	55	144	-39	-27	29	-39
Japan	8,148	9,155	7,738	8,100	514	12	0	-5	5	-13
Southeast Asia	978	1,184	1,239	—	97	-4	21	5	—	20
Indonesia	216	277	279	—	11	-9	28	1	—	-18
Philippines	344	351	373	400	44	0	2	8	0	44
Other East Asia	4,620	5,194	4,648	4,700	318	7	12	-11	2	-15
Taiwan	1,594	1,818	1,738	1,700	126	1	14	-4	0	-6
Korea, Rep.	2,453	2,690	2,159	2,300	135	9	10	-20	10	-29
Hong Kong	572	685	745	700	57	17	19	9	0	17
AFRICA	2,280	2,011	1,883	1,800	172	0	-12	-8	-5	-23
North Africa	1,796	1,527	1,387	1,300	120	8	-15	-9	-7	-25
Morocco	218	164	128	—	19	12	-24	-22	—	-22
Algeria	549	491	479	500	58	2	-11	-2	10	13
Egypt	955	783	692	600	40	22	-20	-9	-14	-54
Sub-Saharan	483	484	498	500	52	-21	0	2	0	-16
Nigeria	30	32	44	—	4	-32	7	37	—	80
Rep. S. Africa	57	91	74	—	7	-33	43	-9	—	2
LATIN AMERICA & CARIBBEAN	5,440	5,158	5,499	5,500	397	24	-5	7	0	-8
Brazil	149	105	271	300	19	-15	-30	159	0	73
Caribbean Islands	1,007	1,008	1,010	—	73	18	0	0	—	4
Central America	448	463	496	—	40	8	3	7	—	-16
Colombia	139	147	124	—	7	-22	6	-16	—	7
Mexico	2,757	2,667	2,885	2,900	198	60	-3	8	0	-5
Peru	81	187	150	—	5	-53	132	-20	—	-48
Venezuela	587	345	307	400	32	-2	-41	-11	0	-28
CANADA	2,179	3,715	4,409	4,700	369	10	70	19	7	15
OCEANIA	268	317	346	300	34	13	18	9	0	5
TOTAL	39,811	40,271	37,813	39,000	2,854	12	2	-7	4	3
Developed countries	17,971	19,868	20,109	20,500	1,406	1	11	1	3	4
Less developed countries	16,422	15,855	14,768	15,500	1,181	14	-3	-7	5	-7
Centrally planned countries	5,217	4,448	2,736	3,000	268	68	-15	-38	11	85

*Fiscal years begin Oct. 1 & end Sept. 30. Fiscal year 1991 began Oct. 1, 1990 & ended Sept. 30, 1991. F = forecast. — = not available.
 Note: Adjusted for transshipments through Canada.

Information contact: Stephen MacDonald (202) 219-0822.

Farm Income

Table 29.—Farm Income Statistics

	Calendar year										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F
	\$ billion										
1. Farm receipts	147.2	141.3	147.1	149.4	140.2	148.3	157.3	168.6	175.8	175	168 to 180
Crops (incl. net CCC loans)	72.3	67.2	69.9	74.3	63.7	65.8	71.6	76.8	80.4	83	80 to 85
Livestock	70.3	69.8	72.9	69.8	71.6	78.0	79.4	84.1	89.8	85	82 to 87
Farm related 1/	4.6	4.6	4.3	5.3	5.7	6.6	6.3	8.1	6.7	7	6 to 8
2. Direct Government payments	3.5	9.3	8.4	7.7	11.8	18.7	14.5	10.9	9.3	9	8 to 11
Cash payments	3.5	4.1	4.0	7.6	8.1	8.6	7.1	9.1	8.4	8	8 to 10
Value of PIK commodities	0.0	5.2	4.5	0.1	3.7	10.1	7.4	1.7	0.9	1	0 to 1
3. Total gross farm income (4+5+6) 2/	163.5	153.2	170.2	162.9	156.1	168.4	174.5	180.3	195.1	190	189 to 197
4. Gross cash income (1+2)	150.8	150.6	155.5	157.2	152.8	165.1	171.9	179.9	188.0	183	179 to 188
5. Nonmoney income 3/	14.3	13.5	8.7	8.0	5.5	5.6	8.1	8.1	8.3	6	5 to 7
6. Value of inventory change	-1.4	-10.9	6.0	-2.3	-2.2	-2.3	-3.5	4.3	2.9	1	1 to 6
7. Cash expenses 4/	112.8	111.0	119.0	109.3	105.0	109.8	114.5	120.8	124.2	126	125 to 132
8. Total expenses	140.0	137.9	143.8	131.9	125.1	128.7	133.9	140.2	144.3	146	146 to 154
9. Net cash income (4-7)	37.9	39.5	36.8	47.9	47.8	55.3	57.4	59.4	61.8	58	52 to 57
10. Net farm income (3-8)	23.5	15.3	28.3	31.0	31.0	39.7	40.6	50.1	50.8	44	40 to 46
Deflated (1982\$)	23.5	14.7	24.5	27.9	27.3	33.8	33.6	39.6	38.7	32	28 to 34
11. Off-farm income	38.4	37.0	39.2	55.2	54.5	58.3	57.2	57.3	67.0	60	59 to 62
12. Loan charges 5/:	3.8	2.3	-2.0	-6.4	-8.7	-8.0	-4.8	-2.3	-1.9	-0	0 to 2
13. 5/:	3.4	0.9	-0.8	-9.6	-11.0	-4.6	-0.3	0.1	1.3	1	-1 to 1
13. Non-real estate											
14. Rental income plus monetary change	6.4	5.4	9.2	9.1	8.0	7.7	7.8	8.9	11.5	12	11 to 14
15. Capital expenditures 5/	13.3	12.7	12.5	9.2	8.5	11.2	11.3	12.6	13.4	13	11 to 14
16. Net cash flow (9+12+13+14-15)	38.2	35.3	30.4	31.9	26.8	39.3	49.1	53.2	58.4	57	53 to 57

1/ Income from machine hire, custom work, sales of forest products, & other miscellaneous cash sources. 2/ Numbers in parentheses indicate the combination of items required to calculate a given item. 3/ Value of home consumption of self-produced food & imputed gross rental value of farm dwellings. 4/ Excludes capital consumption, perquisites to hired labor, & farm household expenses. 5/ Excludes farm households. Total may not add because of rounding. F = forecast. -- = not available.

Information contact: Robert McElroy (202) 219-0800.

Table 30.—Balance Sheet of the U.S. Farming Sector

	Calendar year 1/										
	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F
	\$ billion										
Assets											
Real estate	750.0	753.4	661.7	586.1	542.2	578.8	599.4	605.1	614.4	624	625 to 635
Non-real estate	195.8	191.9	196.9	187.4	182.3	194.2	205.8	214.7	220.9	221	221 to 231
Livestock & poultry	53.0	49.5	49.5	46.3	47.8	58.0	62.2	66.2	69.1	66	68 to 72
Machinery & motor vehicles	88.0	85.8	85.0	82.9	81.5	80.0	82.0	85.8	87.4	89	88 to 92
Crops stored 2/	26.4	24.4	26.3	22.9	18.6	17.8	22.7	23.3	22.4	23	20 to 24
Purchased inputs	—	—	2.0	1.2	2.1	3.0	3.3	2.7	2.8	3	2 to 4
Financial assets	29.7	30.9	32.8	33.3	34.5	35.1	35.4	38.6	38.5	40	39 to 43
Total farm assets	945.1	944.0	857.1	772.6	724.6	772.5	805.1	819.7	834.6	845	850 to 860
Liabilities											
Real estate debt 3/	101.8	103.2	106.7	100.1	90.4	82.4	77.6	75.3	73.4	73	72 to 76
Non-real estate debt 4/	87.0	87.9	87.1	77.5	66.8	82.0	61.7	61.8	63.1	64	63 to 67
Total farm debt	188.8	191.1	193.8	177.6	157.0	144.4	139.4	137.1	136.5	137	136 to 142
Total farm equity	756.3	752.9	663.3	595.0	567.6	628.1	665.8	682.6	698.2	708	710 to 720
	Percent										
Selected ratios											
Debt-to-assets	20.0	20.2	22.6	23.0	21.7	18.7	17.3	16.7	16.4	16	16 to 17
Debt-to-equity	25.0	25.4	29.2	29.8	27.7	23.0	20.9	20.1	19.6	19	19 to 20
Debt-to-net cash income	496	498	518	377	328	261	243	231	221	235	240 to 260

1/ As of Dec. 31. 2/ Non-CCC crops held on farms plus value above loan rates for crops held under CCC. 3/ Excludes debt on operator dwellings, but includes CCC storage and drying facilities loans. 4/ Excludes debt for nonfarm purposes. F = forecast.

Information contacts: Ken Erickson or Jim Ryan (202) 219-0798.

Table 31.—Cash Receipts From Farm Marketings, by State

Region & State	Livestock & products				Crops 1/				Total 1/			
	1988	1990	Aug	Sept	1988	1990	Aug	Sept	1989	1990	Aug	Sept
			1991	1991			1991	1991			1991	1991
\$ million 2/												
NORTH ATLANTIC												
Maine	216	220	17	17	228	240	21	17	444	460	39	34
New Hampshire	65	63	5	5	73	71	8	10	139	134	13	15
Vermont	379	398	31	31	50	49	2	4	429	447	33	35
Massachusetts	113	118	10	9	321	303	30	42	434	418	40	51
Rhode Island	13	13	1	1	65	58	2	14	78	71	3	15
Connecticut	186	198	15	14	240	250	15	26	426	446	30	40
New York	1,937	1,983	146	144	917	1,023	127	153	2,854	3,006	273	297
New Jersey	197	196	17	16	464	452	52	43	662	647	68	59
Pennsylvania	2,611	2,714	203	199	992	1,053	90	102	3,602	3,767	293	301
NORTH CENTRAL												
Ohio	1,698	1,836	139	130	2,088	2,335	153	120	3,787	4,172	292	250
Indiana	1,826	2,060	174	157	2,456	2,971	170	208	4,281	4,931	344	365
Illinois	2,251	2,477	187	193	4,727	5,461	259	214	6,979	7,938	446	407
Michigan	1,311	1,398	103	108	1,611	1,785	138	135	2,923	3,183	240	242
Wisconsin	4,350	4,581	340	333	1,050	1,125	123	139	5,400	5,706	462	472
Minnesota	3,693	3,758	290	290	2,820	3,253	352	214	6,513	7,011	642	505
Iowa	5,293	5,882	474	477	3,755	4,437	337	178	9,049	10,319	811	655
Missouri	2,169	2,271	186	158	1,751	1,668	82	143	3,920	3,939	268	301
North Dakota	669	813	44	57	1,483	1,724	187	199	2,152	2,537	231	256
South Dakota	2,031	2,313	174	183	951	1,036	102	106	2,982	3,349	278	289
Nebraska	5,646	6,037	485	556	3,080	2,808	160	182	8,726	8,845	645	738
Kansas	4,416	4,896	367	372	2,132	2,099	163	160	6,548	6,995	530	532
SOUTHERN												
Delaware	503	460	30	33	159	184	25	26	662	644	55	59
Maryland	859	828	61	63	477	517	31	60	1,336	1,345	92	123
Virginia	1,345	1,379	114	143	694	741	60	95	2,039	2,120	174	237
West Virginia	250	269	23	27	60	70	7	12	310	338	30	39
North Carolina	2,510	2,853	218	228	2,082	2,214	349	442	4,593	4,867	567	670
South Carolina	554	577	47	49	680	599	81	84	1,235	1,176	128	133
Georgia	2,291	2,268	158	176	1,826	1,574	120	303	3,908	3,842	278	479
Florida	1,215	1,260	107	99	5,031	4,448	158	178	6,246	5,708	265	277
Kentucky	1,658	1,698	95	155	1,266	1,400	25	50	2,924	3,098	120	205
Tennessee	1,082	1,111	87	100	963	928	41	51	1,948	2,039	128	151
Alabama	1,875	2,083	177	156	696	655	22	123	2,671	2,737	199	279
Mississippi	1,295	1,322	113	124	981	1,111	12	42	2,276	2,433	125	165
Arkansas	2,661	2,708	239	232	1,498	1,553	38	174	4,157	4,259	277	406
Louisiana	614	637	63	54	1,094	1,284	22	74	1,708	1,921	86	128
Oklahoma	2,377	2,363	293	246	1,137	1,191	119	83	3,515	3,554	413	329
Texas	6,861	7,712	619	647	4,063	4,268	386	366	10,923	11,981	1,005	1,013
WESTERN												
Montana	829	864	55	44	625	742	50	61	1,554	1,606	105	106
Idaho	1,084	1,154	98	95	1,662	1,781	107	192	2,745	2,935	204	287
Wyoming	664	610	52	73	163	157	20	11	827	767	72	84
Colorado	2,649	3,029	179	287	1,321	1,184	99	88	3,969	4,213	278	385
New Mexico	874	1,046	64	77	485	483	56	45	1,459	1,529	120	122
Arizona	744	819	55	62	1,182	1,046	36	31	1,826	1,865	91	83
Utah	567	576	37	48	188	179	19	18	755	755	56	67
Nevada	142	218	21	16	102	115	8	6	244	333	28	23
Washington	1,233	1,396	105	109	2,457	2,420	222	346	3,689	3,816	326	454
Oregon	738	755	59	70	1,546	1,557	177	233	2,285	2,312	236	303
California	5,183	5,515	444	440	12,857	13,344	835	1,236	18,050	18,859	1,379	1,676
Alaska	9	8	1	1	20	19	2	2	29	27	3	3
Hawaii	92	88	7	7	493	499	42	42	585	588	50	49
UNITED STATES	84,131	89,623	7,027	7,322	76,761	80,364	5,845	6,881	160,893	169,987	12,872	14,203

1/ Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period. 2/ Estimates as of end of current month. Totals may not add because of rounding.

Information contact: Roger Strickland (202) 219-0806.

Table 32.—Cash Receipts From Farming

	Annual						1990	1991				
	1985	1986	1987	1988	1989	1990	Sept	May	June	July	Aug	Sept
	\$ million											
Farm marketings & CCC loans*	144,114	135,303	141,759	151,082	160,883	169,987	14,855	11,956	11,808	12,018	12,872	14,203
Livestock & products	69,822	71,553	75,994	79,437	84,131	89,823	7,688	6,875	6,889	6,679	7,027	7,322
Meat animals	38,550	39,081	44,478	46,492	48,857	51,877	4,500	3,911	3,794	3,598	4,097	4,370
Dairy products	18,055	17,724	17,727	17,641	19,396	20,189	1,853	1,587	1,485	1,488	1,507	1,508
Poultry & eggs	11,209	12,701	11,816	12,888	15,372	16,270	1,316	1,225	1,246	1,212	1,239	1,224
Other	2,008	2,048	2,274	2,436	2,507	2,477	217	171	184	383	184	220
Crops	74,293	83,749	85,764	71,645	76,761	80,384	7,169	5,081	5,117	5,337	5,845	6,881
Food grains	8,990	8,741	8,776	7,467	8,247	7,878	713	304	904	1,150	880	744
Feed crops	22,591	16,911	14,576	14,298	17,061	19,118	1,361	1,093	1,146	1,035	1,339	1,180
Cotton (lint & seed)	3,687	3,371	4,189	4,548	5,040	5,234	246	158	104	81	204	216
Tobacco	2,899	1,894	1,816	2,083	2,415	2,738	481	0	0	259	459	479
Oil-bearing crops	12,475	10,614	11,283	13,600	11,866	12,403	1,061	516	379	383	526	1,021
Vegetables & melons	6,572	8,865	9,902	9,787	11,461	11,533	1,272	1,665	1,285	838	1,053	1,270
Fruits & tree nuts	6,946	7,252	8,062	9,204	9,257	9,306	1,013	387	648	882	726	991
Other	6,333	9,101	10,161	10,760	11,415	12,180	1,022	953	653	711	676	979
Government payments	7,704	11,813	19,747	14,480	10,887	9,298	-122	1,054	213	75	65	137
Total	151,818	147,116	158,506	165,562	171,780	179,285	14,733	13,010	12,019	12,091	12,937	14,340

* Sales of farm products include receipts from commodities placed under nonrecourse CCC loans, plus additional gains realized on redemptions during the period.

Information contact: Roger Strickland (202) 219-0806.

Table 33.—Farm Production Expenses

	Calendar year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991 F	1992 F
	\$ million									
Feed purchased	20,573	19,383	18,949	17,472	17,483	20,393	21,002	20,727	20,000	18,000 to 22,000
Livestock purchased	8,818	9,487	9,184	9,758	11,842	12,764	13,138	14,737	14,000	12,000 to 15,000
Seed purchased	2,690	3,388	3,126	3,168	3,259	3,359	3,558	3,582	4,000	3,000 to 5,000
Farm-origin inputs	32,081	32,256	29,281	30,418	32,564	36,515	37,698	39,046	38,000	36,000 to 41,000
Fertilizer & lime	7,055	8,360	7,512	6,820	6,453	6,947	7,249	7,137	7,000	6,000 to 8,000
Fuels & oils	7,211	7,296	6,438	5,310	4,957	5,091	4,983	5,951	6,000	5,000 to 7,000
Electricity	1,982	2,080	1,878	1,795	2,156	2,278	1,990	1,944	2,000	1,000 to 3,000
Pesticides	3,870	4,688	4,334	4,324	4,612	4,577	5,437	5,727	6,000	5,000 to 7,000
Manufactured inputs	20,118	22,404	20,159	18,249	18,077	18,893	19,659	20,759	21,000	20,000 to 23,000
Short-term interest	10,815	10,399	8,735	7,367	6,767	6,797	6,910	6,805	7,000	6,000 to 8,000
Real estate interest 1/	10,815	10,733	9,878	9,131	8,187	7,885	7,781	7,667	7,000	6,000 to 8,000
Total interest charges	21,430	21,129	18,613	16,498	14,954	14,682	14,691	14,472	14,000	12,000 to 15,000
Repair & maintenance 1/ 2/	6,529	6,416	6,370	6,426	6,761	6,800	7,272	7,283	8,000	7,000 to 9,000
Contract & hired labor	8,938	9,427	10,008	9,484	9,975	10,441	11,211	12,662	14,000	12,000 to 16,000
Machine hire & custom work	2,213	2,566	2,354	2,099	2,105	2,350	2,674	2,634	3,000	2,000 to 4,000
Marketing, storage, & transportation	3,904	4,012	4,127	3,652	4,078	3,450	4,080	3,972	4,000	3,000 to 5,000
Misc. operating expenses 1/	10,961	10,331	10,010	9,759	11,327	11,404	12,448	12,238	11,000	10,000 to 14,000
Other operating expenses	33,544	32,751	32,868	31,420	34,248	34,445	37,582	38,669	41,000	40,000 to 45,000
Capital consumption 1/	23,758	20,847	19,299	17,788	16,740	17,075	17,553	17,545	18,000	16,000 to 20,000
Taxes 1/	4,485	4,337	4,542	4,612	4,853	4,848	5,127	5,623	6,000	5,000 to 7,000
Net rent to nonoperator landlords	5,211	8,150	7,690	6,099	7,304	7,445	7,911	8,177	8,000	7,000 to 9,000
Other overhead expenses	33,434	33,334	31,531	28,499	28,897	29,367	30,590	31,345	32,000	30,000 to 35,000
Total production expenses	139,606	141,874	132,432	125,085	128,737	133,902	140,219	144,291	146,000	146,000 to 154,000

1/ Includes operator dwellings. 2/ Beginning in 1982, miscellaneous operating expenses include other livestock purchases & dairy assessments. Totals may not add because of rounding. F = forecast.

Information contacts: Chris McGath (202) 219-0804, Robert McElroy (202) 219-0800.

Table 34.—CCC Net Outlays by Commodity & Function

	Fiscal year									
	1983	1984	1985	1986	1987	1988	1989	1990	1991 E	1992 E
	\$ million									
COMMODITY/PROGRAM										
Feed grains										
Corn	5,720	-934	4,403	10,524	12,346	8,227	2,863	2,450	2,411	3,811
Grain sorghum	814	76	483	1,165	1,203	764	467	381	261	315
Barley	268	89	336	471	394	57	45	-93	62	148
Oats	11	5	2	26	17	-2	1	-5	14	26
Corn & oat products	2	6	7	5	7	7	8	8	7	8
Total feed grains	6,815	-758	5,211	12,211	13,967	9,053	3,384	2,721	2,755	4,308
Wheat	3,419	2,536	4,691	3,440	2,836	678	53	606	2,617	1,883
Rice	664	333	990	947	906	128	631	667	758	698
Upland cotton	1,363	244	1,553	2,142	1,786	666	1,461	-79	392	431
Tobacco	880	346	455	253	-346	-453	-367	-307	-237	-79
Dairy	2,526	1,502	2,085	2,337	1,166	1,295	679	505	783	419
Soybeans	288	-585	711	1,597	-476	-1,676	-86	5	102	20
Peanuts	-6	1	12	32	8	7	13	1	-4	-3
Sugar	49	10	184	214	-65	-246	-25	15	-2	-27
Honey	48	90	81	89	73	100	42	47	23	18
Wool	94	132	109	123	152	1/ 5	93	104	173	198
Operating expense 3/	328	362	346	457	535	614	620	618	634	724
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	757	573
Export programs 4/	398	743	134	102	276	200	-102	-34	567	1,322
1989/89 Disaster/										
Livestock Assistance	0	0	0	0	0	0	3,919	2/ 161	146	2
Other	-1,542	1,295	-314	486	371	1,665	110	609	905	1,446
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,569	11,813
FUNCTION										
Price-support loans (net)	8,438	-27	5,272	13,628	12,199	4,579	-926	-399	267	434
Direct payments 5/										
Deficiency	2,760	612	6,302	6,166	4,833	3,971	5,798	4,178	6,203	6,695
Diversion	705	1,504	1,525	64	382	8	-1	0	0	0
Dairy termination	0	0	0	489	587	260	168	189	97	1
Other	0	0	0	27	60	0	42	3	14	16
Disaster	115	1	0	0	0	6	4	0	0	0
Total direct payments	3,600	2,117	7,827	6,746	5,962	4,245	6,011	4,370	6,314	6,712
1988/89 crop disaster	0	0	0	0	0	0	3,386	2/ 5	8	0
Emergency livestock/										
forage assistance	0	0	0	0	0	31	533	156	138	2
Purchases (net)	2,540	1,470	1,331	1,670	-479	-1,131	116	-48	594	534
Producer storage										
payments	964	268	329	485	832	658	174	185	1	26
Processing, storage,										
& transportation	665	639	657	1,013	1,659	1,113	659	317	299	213
Operating expense 3/	328	362	346	457	535	614	620	618	634	724
Interest expenditure	3,525	1,064	1,435	1,411	1,219	425	98	632	757	573
Export programs 4/	398	743	134	102	276	200	-102	-34	567	1,322
Other	-1,607	679	-648	329	305	1,727	-46	669	990	1,373
Total	18,851	7,315	17,683	25,841	22,408	12,461	10,523	6,471	10,569	11,813

1/ Fiscal 1988 wool & mohair program outlays were \$130,635,000 but include a one-time advance appropriation of \$126,108,000, which was recorded as a wool program receipt by Treasury. 2/ Approximately \$1.5 billion in benefits to farmers under the Disaster Assistance Act of 1989 were paid in generic certificates & were not recorded directly as disaster assistance outlays. 3/ Does not include CCC Transfers to General Sales Manager. 4/ Includes Export Guarantee Program, Export Guarantee Program-Credit Reform, Direct Export Credit Program, Market Promotion Program, & CCC Transfers to the General Sales Manager. 5/ Includes cash payments only. Excludes payment-in-kind in fiscal 83-85 & generic certificates in fiscal 88-90. E = Estimated in the fiscal 1992 Mid-Session Review based on June, 1991 supply & demand estimates. Minus (-) indicates a net receipt (excess of repayments or other receipts over gross outlays of funds).

Information contact: Richard Pazdarski (202) 447-5148.

Food Expenditures

Table 35.—Food Expenditure Estimates

	Annual			1991			1991 year-to-date		
	1988	1989	1990	Sept	Oct P	Nov ² P	Sept	Oct P	Nov P
\$ billion									
Sales 1/									
Off-premise use 2/	255.7	272.1	286.3	23.5	24.3	24.6	218.2	242.5	267.0
Meals & snacks 3/	196.5	205.9	220.3	18.7	19.2	18.6	171.7	190.9	209.4
1990 \$ billion									
Sales 1/									
Off-premise use 2/	290.2	289.5	288.2	23.1	23.9	24.1	212.1	238.0	260.1
Meals & snacks 3/	215.2	215.6	220.2	18.0	18.4	17.8	166.6	185.0	202.7
Percent change from year earlier (\$ bil.)									
Sales 1/									
Off-premise use 2/	4.8	6.4	5.2	-0.8	2.6	2.1	2.6	2.6	2.6
Meals & snacks 3/	8.7	4.8	7.0	7.9	3.5	4.2	3.6	3.6	3.7
Percent change from year earlier (1990 \$ bil.)									
Sales 1/									
Off-premise use 2/	0.6	-0.2	-1.1	-2.3	-1.9	1.2	-0.6	-0.3	-0.2
Meals & snacks 3/	4.4	0.2	2.1	-1.2	0.5	1.3	0.1	0.1	0.2

1/ Food only (excludes alcoholic beverages). Not seasonally adjusted. 2/ Excludes donations & home production. 3/ Excludes donations, child nutrition subsidies, & meals furnished to employees, patients, & inmates. P = preliminary.

NOTE: This table differs from Personal Consumption Expenditures (PCE), table 2, for several reasons: (1) this series includes only food not alcoholic beverages & pet food which are included in PCE; (2) this series is not seasonally adjusted, whereas PCE is seasonally adjusted at annual rates; (3) this series reports sales only, but PCE includes food produced & consumed on farms & food furnished to employees; (4) this series includes all sales of meals & snacks. PCE includes only purchases using personal funds, excluding business travel & entertainment. For a more complete discussion of the differences, see "Developing an Integrated Information System for the Food Sector," Agr.-Econ. Rpt. No. 575, Aug 1987.

Information contact: Aiden Manchester (202) 219-0880.

Transportation

Table 36.—Rail Rates, Grain & Fruit-Vegetable Shipments

	Annual			1990	1991					
	1988	1989	1990	Oct	May	June	July	Aug	Sept	Oct
Rail freight rate index 1/ (Dec. 1984=100)										
All products	104.8	106.4	107.5	108.3	109.6	109.5	109.9	109.4 P	109.5 P	109.3 P
Farm products	105.6	108.4	110.4	111.9	111.8	110.8	113.1	112.6 P	111.9 P	110.9 P
Grain	105.4	108.7	110.1	111.3	111.2	109.9	112.9 P	112.2 P	112.2 P	111.1 P
Food products	103.2	103.9	105.4	106.1	108.2	108.2	108.2 P	107.3 P	108.7 P	108.4 P
Grain shipments										
Rail carloadings (1,000 cars) 2/	30.7	28.4	27.6	27.6	20.8 P	24.5 P	25.5 P	27.6 P	27.4 P	30.1 P
Barge shipments (mil. ton) 3/	3.2	3.3	3.8	3.4	3.7	3.8	4.4	3.8	3.3	3.5
Fresh fruit & vegetable shipments 4/ 5/										
Piggy back (mil. cwt)	2.3	2.2	1.8	1.4	1.8	2.2	2.0	1.7	1.6	1.5
Rail (mil. cwt)	2.6	2.6	2.3	1.8	2.6	3.1	1.9	0.7	1.6	2.3
Truck (mil. cwt)	42.6	42.3	41.5	39.9	48.0	45.7	46.0	41.7	36.9	41.5
Cost of operating trucks hauling produce 4/										
Fleet operation (cts./mile)	118.4	123.4	130.5	137.5	127.6	124.6	124.7	122.6	122.6	123.7

1/ Department of Labor, Bureau of Labor Statistics. 2/ Weekly average; from Association of American Railroads. 3/ Shipments on Illinois & Mississippi waterways, U.S. Corps of Engineers. 4/ Agricultural Marketing Service, USDA. 5/ Preliminary data for 1991. P = preliminary.

Information contact: T.Q. Hutchinson (202) 219-0840.

Indicators of Farm Productivity

Table 37.—Indexes of Farm Production, Input Use & Productivity ^{1/}

	1982	1983	1984	1985	1986	1987	1988	1989	1990 2/	1991 2/
1977=100										
Farm output	118	96	112	118	111	110	102	114	119	120
All livestock products 3/	107	109	107	110	110	113	116	118	117	119
Meat animals	101	104	101	102	100	102	105	104	104	104
Dairy products	110	114	110	117	116	116	118	117	120	121
Poultry & eggs	119	120	123	128	133	144	148	153	162	168
All crops 4/	117	88	111	118	109	108	92	107	114	111
Feed grains	122	87	116	134	123	106	73	108	112	107
Hay & forage	109	100	107	106	106	102	89	101	101	108
Food grains	138	117	129	121	107	107	98	107	136	105
Sugar crops	96	93	95	97	106	111	105	105	107	114
Cotton	85	55	91	94	69	103	107	88	109	127
Tobacco	104	75	90	81	83	62	72	71	84	84
Oil crops	121	91	106	117	110	108	89	106	107	113
Cropland used for crops	101	88	99	98	94	88	87	90	90	—
Crop production per acre	116	100	112	120	116	123	106	119	127	—
Farm input 5/	98	96	95	91	89	89	87	87	88	—
Farm real estate	102	101	99	97	96	95	94	93	93	—
Mechanical power & machinery	89	86	85	80	77	74	74	73	71	—
Agricultural chemicals	118	102	120	115	109	111	112	119	122	—
Feed, seed, & livestock purchases	107	103	103	102	109	116	111	113	113	—
Farm output per unit of input	119	100	118	129	124	124	116	130	135	—
Output per hour of labor										
Farm 6/	126	99	121	139	139	142	135	147	142	—
Nonfarm 7/	99	102	105	106	108	109	111	112	111	—

1/ For historical data & indexes, see Economic Indicators of the Farm Sector: Production & Efficiency Statistics, 1986, ECIFS 5-8. 2/ Preliminary indexes for 1990 based on Crop Production: 1990 Summary, released in January 1991, & unpublished data from the Agricultural Statistics Board, NASS. 3/ Gross livestock production includes minor livestock products not included in the separate groups shown. It cannot be added to gross crop production to compute farm output. 4/ Gross crop production includes some miscellaneous crops not in the separate groups shown. It cannot be added to gross livestock production to compute farm output. 5/ Includes other items not included in the separate groups shown. 6/ Economic Research Service. 7/ Bureau of Labor Statistics. — = not available.

Information contact: George Douvellis (202) 219-0432.

Food Supply & Use

Table 38.—Per Capita Consumption of Major Food Commodities ^{1/}

(See the December 1991 issue)

Information contact: Judy Jones Putnam (202) 219-0870.

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- **Livestock:** cattle, hogs, broilers, eggs, turkeys, dairy
- **Crops:** wheat, rice, feed grains, oilseeds, cotton, tobacco, sugar, vegetables, fruit

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